Connecting via Winsock to STN

Welcome to STN International! Enter x:x

* * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 14:03:52 ON 28 JUL 2009

=> file req

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Uploading C:\Program Files\Stnexp\Queries\10587100.str

ring nodes : 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 chain bonds : 6-13 ring bonds : 1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 11-12 11-16 12-13 13-14 14-15 15-16 15-17 16-20 17-18 18-19 19-20 exact/norm bonds : 1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-10 7-8 8-9 9-10 exact bonds : 6-13 normalized bonds : 11-12 11-16 12-13 13-14 14-15 15-16 15-17 16-20 17-18 18-19 19-20 isolated ring systems :

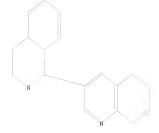
containing 11 : Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11 sam

SAMPLE SEARCH INITIATED 14:04:45 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -819 TO ITERATE

100.0% PROCESSED 819 ITERATIONS 28 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE** BATCH **COMPLETE** PROJECTED ITERATIONS: 14664 TO 18096 243 TO PROJECTED ANSWERS: 877

L2 28 SEA SSS SAM L1

=> d scan

28 ANSWERS REGISTRY COPYRIGHT 2009 ACS on STN

Quinoline, 3-[3,4-dihydro-3,3-dimethyl-5-(2-thienyl)-1-isoquinolinyl]-IN

C24 H20 N2 S MF

10/587100

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):end

=> s 11 full

FULL SEARCH INITIATED 14:04:56 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 16407 TO ITERATE

100.0% PROCESSED 16407 ITERATIONS SEARCH TIME: 00.00.01 602 ANSWERS

L3 602 SEA SSS FUL L1

=> file ca

=> s 13 L4 15 L3

=> d ibib abs fhitstr hitrn 1-15

L4 ANSWER 1 OF 15 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 151:92844 CA

TITLE: Method using lifespan-altering compounds for altering the lifespan of eukaryotic organisms, and screening

for such compounds
INVENTOR(S): Goldfarb, David Scott

PATENT ASSIGNEE(S): University of Rochester, USA SOURCE: U.S. Pat. Appl. Publ., 57pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: Engl PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 20090163545 A1 20090625 US 2008-XI341615 20081222

PRIORITY APPLN. INFO.: US 2007-16362P 20071221

US 2008-23801P 20080125

The invention discloses a method for altering the lifespan of a eukaryotic AR organism. The method comprises the steps of providing a lifespan-altering compound, and administering an effective amount of the compound to a eukaryotic organism, such that the lifespan of the organism is altered. In one embodiment, the compound is identified using the DeaD assay. [This abstract record is one of 20 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.1

838097-35-1

RL: PAC (Pharmacological activity); BIOL (Biological study) (method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)

838097-35-1 CA RN

2(1H)-Quinolinone, 3-[2-(cyclopropylcarbonyl)-1,2,3,4-tetrahydro-6,7-CN dimethoxy-1-isoquinoliny1]-6,7-dimethoxy- (CA INDEX NAME)

838097-35-1

RL: PAC (Pharmacological activity); BIOL (Biological study) (method using lifespan-altering compds. for altering lifespan of eukaryotic organisms, and screening for such compds.)

ANSWER 2 OF 15 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:578981 CA

TITLE: Soil- or seed-treating agents comprising guinoline compounds and salts thereof and plant disease control

with quinolines INVENTOR(S): Ito, Hirovuki; Tamagawa, Yasushi; Tanaka, Harukazu;

Ohara, Toshiaki

PATENT ASSIGNEE(S): Sankyo Agro Company, Limited, Japan

SOURCE: PCT Int. Appl., 70pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | | | | | KIND DATE | | | | APPL | ICAT | ION I | NO. | | DATE | | | | |
|------------|------|------|-----|-----|-----------|-----|------|------|------|------|-------|------|-----|------|-----|------|-----|--|
| | | | | | | _ | | | | | | | | | | | | |
| WO | 2008 | 0661 | 48 | | A1 | | 2008 | 0605 | | WO 2 | 007- | JP73 | 143 | | 2 | 0071 | 130 | |
| | W: | AE. | AG. | AL. | AM. | AT. | AU. | AZ. | BA. | BB. | BG. | BH. | BR. | BW. | BY. | BZ. | CA, | |

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CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
     AU 2007326412
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                                20080605
                                            AU 2007-326412
                                                                    20071130
     IN 2009KN02411
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                                20090717
                                            IN 2009-KN2411
                                                                    20090629
PRIORITY APPLN. INFO.:
                                            JP 2006-325344
                                                                 A 20061201
                                            WO 2007-JP73143
                                                                 W 20071130
OTHER SOURCE(S):
                        MARPAT 148:578981
GI
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AB Soil- or seed-treating agents with an excellent controlling effect against various plant pathogens (particularly, Pyricularia oryzae) comprise ≥ 1 quinoline (I, e.g., where Rl, R2 = (un)substituted alkyl, (hetero)aryl, etc.; R3, R4 = H, (un)substituted alkyl, halo, alkoxy, etc.; X = halo, (un)substituted alkyl, etc.; Y = halo, OH, etc.; n = 0-4; m = 0-6) or a salt thereof. Thus, when rice plants which had been sprayed with a Pyricularia oryzae spore suspension were grown on soil treated with 400 g/10 are of I (R1, R2 = Me; R3, R4 = H; Xn = 5-F; Ym = H), rice blast disease development was not observed 7 days after inoculation.

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(soil- or seed-treating agents comprising quinolines and salts thereof and their use for control of plant diseases)

RN 861646-26-6 CA

CN Quinoline, 3-(5-fluoro-3,4-dihydro-3,3-dimethyl-1-isoquinolinyl)- (CA INDEX NAME)

T 861646-26-6 861646-33-5 861646-37-9 861646-70-0 861646-76-6 861646-87-9 861646-90-4 861647-31-6 861647-32-7 861647-88-6 861647-73-6 861647-74-7 861647-88-9 861647-85-0 861648-8-48-8 861648-83-3 861648-44-4 861648-48-8 861648-49-9 861648-62-6 861648-63-7 952022-89-8

952022-89-8
RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL

(Biological study); USES (Uses)
(soil- or seed-treating agents comprising quinolines and salts thereof

and their use for control of plant diseases)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 15 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:462227 CA

TITLE: Medical fungicides containing 3-[(di- or tetrahydro)isoquinolin-1-yl]quinolines

INVENTOR(S): Ito, Hiroyuki; Tamagawa, Yasushi
PATENT ASSIGNEE(S): Sankyo Agro Co., Ltd., Japan

PATENT ASSIGNEE(S): Sankyo Agro Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 54pp.

DOCUMENT TYPE: CODEN: JKXXAF
LANGUAGE: Patent
Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | | |
|---|--------|------------|--------------------------------|----------------------|--|--|
| | | | | | | |
| JP 2007269686
PRIORITY APPLN. INFO.: | A | 20071018 | JP 2006-96830
JP 2006-96830 | 20060331
20060331 | | |
| OTHER SOURCE(S):
GI | MARPAT | 147:462227 | | | | |

- Medical fungicides contain title compds. I, II [R1, R2 = (un)substituted AB C1-6 alkyl, (un)substituted (hetero)aryl, (un)substituted aralkyl; R1CR2 may be linked to form (un) substituted C3-10 cycloalky1; R3, R4 = H, (un) substituted C1-6 alkyl, halo, C1-6 alkoxy, OH; R3R4 may be linked to form C1-6 alkylidene; R3CR4 may be keto, (un) substituted C3-10 cycloalkyl; R5 = none, H, acyl, (un)substituted C1-6 alkyl, O; X = halo, (un) substituted C1-6 alkyl, (un) substituted C2-6 alkenyl, (un) substituted (hetero) aryl, etc.; Y = halo, C1-6 alkyl, C1-6 alkoxy, OH; n = 0-4; m = 00-6; the doted line may be double bond], or their salts as active ingredients. Thus, I (R1 = R2 = Me, R3 = R4 = Ym = H, R5 = none, Xn = 5-F; the doted line is double bond) at 100 ppm showed ≥80% antifungal activity against Candida glabrata, Cryptococcus neoformans, and Aspergillus fumigatus, and at 10 ppm against Trichophyton mentagrophytes, T. rubrum, and Microsporum gypseum. ΤТ 861646-26-6
- RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (medical fungicides containing [(di- or tetrahydro)isoquinolinyl]quinolines effective at low dose)
- RN 861646-26-6 CA CN Quinoline, 3-(5-fluoro-3,4-dihydro-3,3-dimethyl-1-isoquinolinyl)- (CA INDEX NAME)

IT 861646-26-6 861646-33-5 861646-37-9 861646-70-0 861646-76-6 861646-87-9 861647-31-6 861647-32-7 861647-59-8 861647-84-9 861647-85-0 952022-89-8 952022-90-1 952022-91-2 952022-92-3 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
(medical fungicides containing [(di- or tetrahydro)isoquinolinyl]quinolines

effective at low dose)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L4 ANSWER 4 OF 15 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:301004 CA

TITLE: Preparation of 1,2,3,4-tetrahydroquinolines and pesticides containing them

INVENTOR(S): Ito, Hiroyuki; Kajino, Fumie; Fujiwara, Kota;
Morimoto, Soushi

PATENT ASSIGNEE(S): Sankyo Agro Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 45pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 2007217353 A 20070830 JP 2006-40318 20060217 PRIORITY APPLN. INFO.: JP 2006-40318 20060217 OTHER SOURCE(S): MARPAT 147:301004 GI

$$R^{3}$$
 R^{4}
 X_{1}
 R^{2}
 R^{1}
 R^{1}
 R^{1}
 R^{5}
 R^{6}
 R^{6}

AB Title compds. I [the dot line is single or double bond; R1, R2 = (1-3 halo-substituted) C1-6 alkyl, (hetero)aryl; R1MR2 may be C3-10 cycloalkyl; R3, R4 = H, C1-6 alkyl, halo; R3CR4 may be C3-10 cycloalkyl; R5 = H, acyl, O, (aryl-substituted) C1-6 alkyl; R6 = H, acyl, (1-3 halo- or aryl-substituted) C1-6 alkyl; R6 = H, acyl, (1-3 halo- or aryl-substituted) C1-6 alkyl; X = halo, C1-6 alkyl; Y = halo, C1-6 alkyl; Oxyl, OH; p = 0, 1; m, n = 0-4; when the dot line is single bond, then p = 1; R5 = H, acyl, (aryl-substituted) C1-6 alkyl; when the dot line is double bond, then p = 0, 1; R5 = 0] are prepared Thus, I (the dot line is double bond; R1-R4 = Me, p = 0, R6 = Ym = H, Xm = 5-F) showed 100% fundicidal activity against Pyricularia oryzae and Botrytis cinerea.

T 861646-26-6, 3-(5-Fluoro-3,3-dimethyl-3,4-dihydroisoquinolin-1-yl)quinoline

RL: RCT (Reactant); RACT (Reactant or reagent)

- (preparation of tetrahydroquinolines as agrochem. fungicides)
- RN 861646-26-6 CA
- CN Quinoline, 3-(5-fluoro-3,4-dihydro-3,3-dimethyl-1-isoquinolinyl)- (CA INDEX NAME)

II 861646-26-6, 3-(5-Fluoro-3,3-dimethyl-3,4-dihydroisoquinolin-1yl)quinoline

RI: RCT (Reactant); RACT (Reactant or reagent)
(preparation of tetrahydroquinolines as agrochem, fungicides)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L4 ANSWER 5 OF 15 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 146:163036 CA TITLE: Preparation of 3-(isoquinolin-1-v1)quinoline derivatives as agrochemical and horticultural

fungicides

INVENTOR(S):
Ito, Hiroyuki; Komai, Hiroyuki; Fujiwara, Kota;
Tanaka, Harukazu; Tamagawa, Yasushi; Kajino, Fumie

PATENT ASSIGNEE(S): Sankyo Agro Company, Limited, Japan

SOURCE: PCT Int. Appl., 114pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Patent
Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT NO. | | | | | KIND DATE | | APPLICATION NO. | | | | | | DATE | | | | |
|-------|------------|------|------|-----|-----|-----------|----------|-----------------|-----|------|------|------|-----|------|----------|------|-----|--|
| | | | 22 | | A 1 | _ | 20070125 | | | MO 2 | | | | | 20060721 | | | |
| 110 | | | AG, | | | | | | | | | | | | | | | |
| | | | co, | | | | | | | | | | | | | | | |
| | | GE, | GH, | GM, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KN, | KP, | |
| | | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, | |
| | | MW, | MX, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RS, | RU, | |
| | | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SY, | ΤJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | |
| | | US, | UZ, | VC, | VN, | ZA, | ZM, | ZW | | | | | | | | | | |
| | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, | |
| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, | |
| | | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, | |
| | | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, | |
| | | KG, | KZ, | MD, | RU, | ΤJ, | TM | | | | | | | | | | | |
| OPITY | A DD | T NI | TMEO | | | | | | | TD 2 | 005- | 2123 | 2.4 | | 70 2 | 0050 | 722 | |

PRIORITY APPLN. INFO.: JP 2005-212324 A 20050722 OTHER SOURCE(S): MARPAT 146:163036 GI

AB The title compds. (I) [the ring A, B = each (un)substituted benzene ring, C3-8 cycloalkyl ring optionally unsatd., or 5- or 6-membered heteroaryl ring containing 1-4 heteroatoms selected from O, N and S; R1-R4 = H, halogen, HO, acyloxy, acylthio, cyano, each (un)substituted C1-6 alkyl, C1-6 alkyl, C1-6 alkyl, C1-6 alkyl, C1-6 alkyl, C3-6 cycloalkyl, C3-6 cycloalkyl, C3-6 cycloalkyl, C3-6 cycloalkyl, C3-6 cycloalkyl, C2-6 alkenyloxy, C2-6 alkenyloxy, C2-6 alkenyloxy, C2-6 alkenylthio, C2-6 alkynylthio, aryl, arylthio, heteroaryl, heteroarylthio, aralkyl, aralkyloxy, or aralkylthio; or at least 2 of R1-R4 together form (un)substituted C3-8 cycloalkyl ring optionally containing 1-3 heteroatoms selected from O, N, and S; or (R3 and R4) or (R3 and R4) together

represent oxo; (R1 and R2) or (R3 and R4) together represent CH2; or (R1 and R3 or R4) or (R2 and R3 or R4) together represent a single bond; Q=N, (un) substituted NH; when n=an integer of 2-4, $X=group\ A$, O-(un) substituted NH; when <math display="inline">n=an integer of 2-6, $Y=group\ A$, HO; group A=halo, each (un) substituted C1-6 alkylı, C3-6 cycloalkyl, C2-6 alkenyl, C2-6 alkynıl, aryıl, heteroaryıl, C1-6 alkylıhio; C1-6 alkylsulfionyl, C1-6 alkylsulfonyl, or NH2, acyl, cyano; n=an integer of 0-4! m=an integer of 0-6] or salts thereof are prepared These compds. show an excellent effect on a variety of plant pathogens, particularly for rice blast (Pyricularia oryzae), without causing damage to a host plant. Thus, 230 mg 2-chloroquinoline3-arcarbonitrile and 350 mg 3-(2-fluorophenyl)-2,3-dimethylbutan-2-ol were added to 1.0 mL H2SO4 and stirred at room temperature for 1 h. The reaction mixture was poured into H2O

and made alkaline by adding aqueous NH3 solution and extracted with EtOAc to give, after

purification by TLC, 9% 2-chloro-3-(5-fluoro-3,3,4,4-tetramethyl-3,4-dihydroisoquinolin-1-yl)quinoline (II). II and 3-(5-fluoro-3,4-dihydroisoquinolin-1-yl)quinoline at 300 ppm completely controlled Botrytis cinerea on tomato seedlings and Pyricularia oryzae on rice seedlings, resp.

ITC 861648-43-3P, 4,4-Difluoro-3,3-dimethyl-8b-(quinolin-3-yl)-4,8b-dihydro-3H-oxazireno[3,2-a]isoquinoline

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of 3-(isoquinoline-1-yl)quinoline derivs. as agrochem. and horticultural fungicides)

RN 861648-43-3 CA

CN 3H-1,2-Oxazirino[3,2-a]isoquinoline,

4,4-difluoro-4,8b-dihydro-3,3-dimethyl-8b-(3-quinolinyl)- (CA INDEX NAME)

IT 861648-43-3P, 4,4-Difluoro-3,3-dimethyl-8b-(quinolin-3-yl)-4,8bdihydro-3H-oxazireno[3,2-a]isoquinoline 861648-62-6P,
3-(4,4-Difluoro-3,3-dimethyl-2-oxo-3,4-dihydroisoquinolin-1-yl)quinoline
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(intermediate; preparation of 3-(isoquinoline-1-y1)quinoline derivs. as agrochem. and horticultural fungicides)

IT 919786-21-3P, 3-(5-Fluoro-3,4-dihydroisoquinolin-1-yl)quinoline
919786-74-6P, 3-(4,4-Difluoro-2-hydroxy-3,3-dimethyl-1,2,3,4tetrahydroisoquinolin-1-yl)quinoline
RL: AGR (Agricultural use); BSU (Biological study, unclassified); RCT
(Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or readgent); USES (Uses)

(preparation of 3-(isoquinoline-1-y1)quinoline derivs. as agrochem. and

```
horticultural fungicides)
919786-18-8P, 2-Chloro-3-(5-fluoro-3,3,4,4-tetramethyl-3,4-
dihydroisoguinolin-1-vl)guinoline 919786-20-2P.
3-(5-Fluoroisoquinolin-1-yl)quinoline 919786-22-4P,
3-(5-Fluoro-1, 2, 3, 4-tetrahydroisoguinolin-1-yl)guinoline
919786-23-5P, 3-(6-Fluoro-3,4-dihydroisoguinolin-1-yl)quinoline
919786-24-6P, 3-(7-Fluoro-3,4-dihydroisoguinolin-1-vl)guinoline
919786-25-7P, 3-(5-Chloro-3,4-dihydroisoguinolin-1-vl)guinoline
919786-26-8P, 3-(6-Chloro-3,4-dihydroisoquinolin-1-yl)quinoline
919786-27-9P, 3-(7-Chloro-3,4-dihydroisoquinolin-1-yl)quinoline
919786-28-0P, 3-(5-Bromo-3,4-dihydroisoguinolin-1-v1)quinoline
919786-29-1P, 3-(7-Methyl-3,4-dihydroisoguinolin-1-yl)quinoline
919786-30-4P, 3-(6-Methoxy-3,4-dihydroisoquinolin-1-yl)quinoline
919786-31-5P, 3-(6,7-Dimethoxy-3,4-dihydroisoguinolin-1-
vl)quinoline 919786-32-6P.
3-(4-Methyl-3,4-dihydroisoquinolin-1-yl)quinoline 919786-33-7P,
3-(5-Fluoro-4-methyl-3, 4-dihydroisoquinolin-1-yl)quinoline
919786-34-8P, 3-(5-Fluoro-4-ethyl-3,4-dihydroisoguinolin-1-
v1) quinoline 919786-35-9P,
3-(5-Fluoro-4-propvl-3,4-dihydroisoguinolin-1-vl)guinoline
919786-36-0P, 3-(3-Methyl-3,4-dihydroisoquinolin-1-yl)quinoline
919786-37-1P, 3-(5-Chloro-3-methyl-3,4-dihydroisoguinolin-1-
v1)quinoline 919786-38-2P.
3-(5-Fluoro-3-methyl-3,4-dihydroisoguinolin-1-yl)guinoline
919786-39-3P, 3-(5-Fluoro-3,4-dimethyl-3,4-dihydroisoquinolin-1-
v1) quinoline 919786-40-6P,
3-(5-Fluoro-3-methyl-4-ethyl-3,4-dihydroisoguinolin-1-yl)guinoline
919786-41-7P, 3-(5-Fluoro-3-methyl-4-propyl-3,4-dihydroisoquinolin-
1-v1) quinoline 919786-42-8P.
3-(5-Chloro-3, 4-dimethyl-3, 4-dihydroisoguinolin-1-yl) quinoline
919786-43-9P, 3-(5-Fluoro-3-ethyl-4-methyl-3,4-dihydroisoguinolin-
1-v1) quinoline 919786-44-0P,
3-(4,4-Dimethyl-3,4-dihydroisoguinolin-1-vl)guinoline 919786-45-1P
, 1'-(Quinolin-3-yl)-3'H-spiro[cyclopropane-1,4'-isoquinoline]
919786-46-2P, 1'-(Quinolin-3-yl)-3'H-spiro[cyclobutane-1,4'-
isoquinoline] 919786-47-3P,
1'-(Quinolin-3-yl)-3'H-spiro[cyclohexane-1,4'-isoquinoline]
919786-48-4P, 3-(5-Fluoro-4,4-dimethyl-3,4-dihydroisoquinolin-1-
vl)quinoline 919786-49-5P,
5'-Fluoro-1'-(quinolin-3-v1)-3'H-spiro(cyclopentane-1,4'-isoquinoline)
919786-50-8P, 5'-Fluoro-1'-(quinolin-3-v1)-3'H-spiro(cyclobutane-
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919786-52-0P, 3-(5-Fluoro-3-methoxy-4,4-dimethyl-3,4-
dihydroisoguinolin-1-vl)guinoline 919786-53-1P,
3-(5-Fluoro-4, 4-diethyl-3, 4-dihydroisoguinolin-1-yl)guinoline
919786-54-2P, 3-(5-Fluoro-3,3,4,4-tetramethyl-3,4-
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3-(5-Fluoro-3, 3, 4, 4-tetramethyl-3, 4-dihydroisoguinolin-1-yl)-2-chloro-7-
methylquinoline 919786-56-4P,
3-(5-Chloroisoquinolin-1-yl)quinoline 919786-57-5P,
3-(5-Bromoisoquinolin-1-yl)quinoline 919786-58-6P,
3-(3-Methylisoguinolin-1-vl)guinoline 919786-59-7P.
3-(5-Chloro-3-methylisoguinolin-1-vl)guinoline 919786-60-0P.
3-(5-Chloro-1, 2, 3, 4-tetrahydroisoguinolin-1-yl)guinoline
919786-61-1P 919786-62-2P 919786-63-3P,
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        (preparation of 3-(isoquinoline-1-yl)quinoline derivs. as agrochem. and
        horticultural fungicides)
     861647-84-9, 3-(4,4-Difluoro-3,3-dimethyl-3,4-dihydroisoguinolin-1-
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OS.CITING REF COUNT:
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L4 ANSWER 6 OF 15 CA COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                         143:193918 CA
TITLE:
                         Preparation of quinoline compounds as agricultural
                         fungicides
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INVENTOR(S):
PATENT ASSIGNEE(S):

Ito, Hiroyuki; Fujiwara, Kota; Morimoto, Munetsugu; Tanaka, Harukazu; Tamagawa, Yasushi; Komai, Hiroyuki

Sankyo Agro Company, Limited, Japan

SOURCE: PCT Int. Appl., 173 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

LANGUAGE: Japane: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | | APPLICATION NO. | | | | | |
|------------------------|-----------------|---------------------|-----------------|--|--|--|--|
| | | WO 2005-JP1171 | 20050121 | | | | |
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| AU 2005206437 | A1 20050804 | AU 2005-206437 | 20050121 | | | | |
| CA 2554187 | A1 20050804 | CA 2005-2554187 | 20050121 | | | | |
| EP 1736471 | A1 20061227 | EP 2005-704224 | 20050121 | | | | |
| R: AT, BE, BG, | CH, CY, CZ, DE, | DK, EE, ES, FI, FR, | GB, GR, HU, IE, | | | | |
| IS, IT, LI, | LT, LU, MC, NL, | PL, PT, RO, SE, SI, | SK, TR | | | | |
| CN 1910172 | A 20070207 | CN 2005-80002960 | 20050121 | | | | |
| US 20080275242 | A1 20081106 | US 2006-587100 | 20060721 | | | | |
| KR 2006127154 | A 20061211 | KR 2006-716976 | 20060823 | | | | |
| PRIORITY APPLN. INFO.: | | JP 2004-15360 | A 20040123 | | | | |
| | | WO 2005-JP1171 | W 20050121 | | | | |
| OTHER SOURCE(S): | MARPAT 143:1939 | 18 | | | | | |

- AB Title compds. I, II, III, IV [R1, R2 = optionally substituted alkyl with halo, etc.; R3, R4 = H, halo, etc.; R5 = H, acyl, etc.; X = halo, etc.; Y = halo, etc.; n = 0-4; m = 0-6; were prepared For example, cyclization of quinoline-3-carbonitrile with a mixture of
 - 1-fluoro-(2-methylpropen-1-yl)benzene and
 - 1-fluoro-(2-methylpropen-2-yl)benzene in the presence of methanesulfonic acid afforded 3-(5-fluoro-3,3-dimethyl-3,4-dihydroisoguinolin-1-
 - yl)quinoline (V) in 47% yield. Compds. V exhibited the fungicidal activity of 100% against pyricularia oryzae. Formulations are given. T 861646-19-7P
- BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
- (preparation of quinoline compds. as agricultural fungicides) $\mbox{RN} \quad 861646-19-7 \quad \mbox{CA}$

GI

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

CN Quinoline, 3-(3,4-dihydro-3,3-dimethyl-1-isoquinolinyl)- (CA INDEX NAME)

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(preparation of quinoline compds. as agricultural fungicides)
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     RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
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     (Uses)
        (preparation of quinoline compds. as agricultural fungicides)
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    ANSWER 7 OF 15 CA COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                        142:411286 CA
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A versatile synthesis of pyrazolo[3,4-c]isoquinoline

TITLE:

SOURCE:

derivatives by reaction of 4-aryl-5-aminopyrazoles with aryl/heteroaryl aldehydes: the effect of the

heterocycle on the reaction pathways

AUTHOR(S): Bogza, Šergei L.; Kobrakov, Konstantin I.; Malienko, Anna A.; Perepichka, Igor F.; Sujkov, Sergei Yu.; Bryce, Martin R.; Lyubchik, Svetlana B.; Batsanov,

Andrei S.; Bogdan, Natalva M.

CORPORATE SOURCE: L. M. Litvinenko Institute of Physical Organic Chemistry and Coal Chemistry, National Academy of

Sciences of Ukraine, Donetsk, 83114, Ukraine Organic & Biomolecular Chemistry (2005), 3(5), 932-940

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:411286

AB The reaction of 4-(3,4-dimethoxyphenyl)-5-aminopyrazoles I (R1 = Me, Et, Ph, PhCH2) with aromatic and heterocyclic aldehydes R2CHO (R2 = Ph, 3-C1C6H4, 4-Et2NC6H4, 3-pyridyl, 2-quinolinyl, 1,2,3-thiadiazol-5-yl) in strong acidic media (trifluoroacetic or formic acid) produced the intermediate pyrazolyl azomethines, which undergo cyclization, similar to the Pictet-Spengler condensation, to give, after in situ aromatization, 5-aryl(heteroaryl)-pyrazolo[3,4-c]isoquinolines II. Whereas for benzaldehyde and its derivs. this one-pot synthesis presents a convenient general route to 5-aryl-pyrazolo[3,4-c]isoquinolines II, in the case of heterocyclic aldehydes the product structure varies markedly with the structure of the aldehyde used: (i) 3-pyridyl-, 3-quinolyl-, 3-thienyl-, and 1,2,3-thiadiazoly1-5-carboxaldehydes give pyrazolo[3,4-c]isoquinolines II; (ii) 1-methylbenzimidazolyl-2-carboxaldehyde gives only intermediate azomethine, which does not cyclize; (iii) 1-R3-3-indolylcarboxaldehydes (R3 = H, Me, PhCH2) eliminate the heteroaryl fragment resulting in 5-unsubstituted pyrazolo[3,4-c]isoquinolines II (R2 = H). Thienyl-2-carboxaldehyde reacts by both pathways (i) and (iii) depending on the reaction conditions. The single crystal X-ray structures for II (R1 = Me, R2 = 2-thienyl; R1 = PhCH2, R2 = 4-Et2NC6H4; R1 = Me, R2 = H) provide confirmation of the different types of products formed in these reactions. Mechanisms which explain these transformations are presented. 850411-73-3P

RL: SPN (Synthetic preparation); PRRP (Preparation) (preparation of pyrazolo[3], 4-clisoquinolines by Pictet-Spengler condensation of (dimethoxyphenyl)aminopyrazoles with aromatic or heteroarom. aldehydes followed by aromatization)

RN 850411-73-3 CA

CN 3H-Pyrazolo(3,4-c)isoquinoline, 7,8-dimethoxy-1-methyl-3-phenyl-5-(3quinolinyl)- (CA INDEX NAME)

850411-73-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of pyrazolo[3,4-c]isoquinolines by Pictet-Spengler condensation of (dimethoxyphenyl)aminopyrazoles with aromatic or heteroarom. aldehydes

followed by aromatization)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT:

65 THERE ARE 65 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 15 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:219282 CA

TITLE: Pyrazoloisoquinoline derivatives as kinase inhibitors, and their preparation, pharmaceutical compositions, and use in the treatment of diseases involving

increased NIK activity.

INVENTOR(S): Majid, Tahir N.; Hopkins, Corey; Pedgrift, Brian L.;
Collar, Nicola; Wirtz-Brugger, Friederike; Merrill,

Jean

PATENT ASSIGNEE(S): Aventis Pharmaceuticals Inc., USA

SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | | | | KIND DATE | | | APPLICATION NO. | | | | | | DATE | | | | | |
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| WO 2005012301 | | | | | A1 | | 2005 | 0210 | | WO 2 | 003- | 20030703 | | | | | | |
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PRIORITY APPLN. INFO .:
                                             US 2003-461795
                                                                    20030613
                                             WO 2003-US21144
                                                                 W 20030703
                        CASREACT 142:219282; MARPAT 142:219282
OTHER SOURCE(S):
GI
```

Novel pyrazoloisoguinoline derivs. I, useful as kinase inhibitors, are disclosed [wherein: A = (un)substituted alkyl, OH or derivs., SH or derivs., CO2H or derivs., NH2 or derivs., cyano, (un)substituted heteroaryl, cycloalkyl, or heterocyclyl; B = bond, (un)substituted CH:CH, C.tplbond.C, O(CH2)1-4, O, S, CO, (un)substituted NH, NHCO, CONH, NHSO2, SO2NH, NHCONH, or C1-4 alkylene; D = (un)substituted alkyl, heteroaryl, heterocyclyl, aryl, or cycloalkyl; or BD = H, halo, fluoroalkoxy, (un) substituted alkyl; R = H, alkyl, (un) substituted arylalkyl; X, Z = H, alkyl, OH, alkoxy, halo, fluoroalkyl, CO2H or derivs., NH2 or derivs., cyano, SH or derivs., (un) substituted heterocyclyl or cycloalkyl; with provisos]. I are suitable for producing pharmaceuticals for the prophylaxis and therapy of diseases whose course involves an increased activity of NIK. Approx. 75 examples were prepared, and these plus addnl. compds. are individually claimed. For instance, 3-methoxybenzoic acid was condensed with 3-methyl-5-phenyl-1H-pyrazol-4-ylamine using HOBT and DIPC, and the resultant benzamide derivative was cyclized by treatment with P205 and POC13 in xylene at 160°, to give title compound II. In a test for inhibition of release of $IL1\beta$, $TNF\alpha$, and IL6 in LPS-stimulated heparinized whole human blood, II had IC50 values of 1.3, 1.2, and 7

uM, resp.

824968-78-7P, 3-Methyl-5-(quinolin-3-v1)-1H-pyrazolo[4,3-

clisoquinoline

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug candidate; preparation of pyrazoloisoguinoline derivs. as NIK inhibitors)

RN 824968-78-7 CA

CN 1H-Pyrazolo[4,3-c]isoquinoline, 3-methyl-5-(3-quinolinyl)- (CA INDEX NAME)

824968-78-7P, 3-Methyl-5-(quinolin-3-yl)-1H-pyrazolo[4,3-

c]isoquinoline

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(drug candidate; preparation of pyrazoloisoquinoline derivs. as NIK

inhibitors) OS.CITING REF COUNT:

THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD 2 (2 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 15 CA COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 142:134600 CA

TITLE:

Preparation of pyrazoloisoguinolines as NFkB-inducing kinase (NIK) inhibitors

INVENTOR(S): Majid, Tahir Nadeem; Hopkins, Corev; Pedgrift, Brian Leslie; Collar, Nicola; Wirtz-Brugger, Friederike;

Merrill, Jean

PATENT ASSIGNEE(S): Aventis Pharmaceuticals Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 41 pp. CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--------|------------|-----------------|----------|
| | | | | |
| US 20050009859 | A1 | 20050113 | US 2003-613588 | 20030703 |
| US 7132428 | B2 | 20061107 | | |
| PRIORITY APPLN. INFO.: | | | US 2003-613588 | 20030703 |
| OTHER SOURCE(S): | MARPAT | 142:134600 | | |
| GT | | | | |

RB Title compds. [I; A = (substituted) alkyl, heteroaryl, heterocyclyl; B = bond, C:CR1, C.tplbond.C, O(CH2)a, O, S, CO, NR2, NR2CO, (substituted) alkylene, etc.; R1 = H, alkyl, aryl, etc.; R2 = alkyl, OH, alkoxy, halo, etc.; a = 1-4; D = (substituted) alkyl, heteroaryl, heterocyclyl, aryl, cycloalkyl; BD = H, halo, fluoroalkyl, fluoroalkoxy, etc.; R = H, alkyl, (substituted) aralkyl; X, Z = H, alkyl, OH, alkoxy, halo, fluoroalkyl, COZNI, N(R1)2, cyano, SR1, SORI, SOZRI, (substituted) heterocyclyl, cycloalkyl, etc.; with provisos], were prepared Thus, hydroxybenzotriazole, diiogoropyl carbodiimide, benzoic acid, and 3,5-diphenyl-1H-pyrazol-4-ylamine were stirred 12 h in MeCN to give a residue which was heated with P2O5 and POCl3 in xylene at 150° for 4 h followed by stirring at room temperature for 12 h to give 3,5-diphenyl-1H-pyrazolo[4,3-c]isoquinoline. The latter inhibited TNFq release in LPS-stimulated human peripheral blood lymphocytes

with IC50 = 1.9 nM. IT 824968-78-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of pyrazoloisoquinolines as NFkB-inducing kinase inhibitors)

RN 824968-78-7 CA

CN 1H-Pyrazolo[4,3-c]isoquinoline, 3-methyl-5-(3-quinolinyl)- (CA INDEX NAME)

IT 824968-78-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(claimed compound; preparation of pyrazoloisoquinolines as NFkB-inducing kinase inhibitors)
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 15 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 108:21688 CA

ORIGINAL REFERENCE NO.: 108:3675a,3678a

TITLE: Isoquinolvlquinoline derivatives: Part IV - synthesis

of some 4-substituted

3-(3,4-dihydro-3-methyl-1-isoguinolyl)-7-

chloroquinoline derivatives as possible trypanocidal

agents

AUTHOR(S): Das, Michael; Chaudhuri, Subhankar; Ray, Manotosh R.;

Chakravorti, S. S.

Bengal Immunity Res. Inst., Calcutta, 700 017, India

CORPORATE SOURCE:

SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1986),

25B(10), 1072-8

CODEN: IJSBDB; ISSN: 0376-4699

DOCUMENT TYPE: Journal LANGUAGE: English

CASREACT 108:21688 OTHER SOURCE(S):

AR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

- Cyclization of amide I (R = CONHCHMeCH2Ph) using polyphosphoric acid and POC13 affords (methyldihydroisoquinolyl)quinoline II (R1 = OH) (III), which upon treatment with POC13 is converted to II (R1 = C1) (IV). IV reacts with NH3, N2H4·xH2O, and amines to give II (R1 = NH2, NHNH2, morpholino, piperidino, pyrrolidino). Reaction of IV with NaOEt affords aromatic derivs. V (R2 = OEt, C1; R3 = H). Reduction of III with NaBH4 gives (tetrahydromethylisoquinolyl)chloroquinoline VI and dehydrogenation of III with S8 in the presence of Tetralin gives [methylnaphthylisoquinolyl]dichloroquinoline V (R2 = C1, R3 = β-naphthyl). Acid hydrolysis of IV and subsequent reaction with acetamidocresol derivs. affords (dihydroisoguinolyl) (arylamino) quinolines VII (R4 = NEt2, morpholino, piperidino). Compds. III, IV, II (R1 = NHNH2), and VII (same R4) showed no significant trypanocidal activity against T. cruzi and T. evansi in mice.
- ΙT 111826-43-8P
 - RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and trypanocidal activity of)
- 111826-43-8 CA RN
- Quinoline, 7-chloro-3-(3,4-dihydro-3-methyl-1-isoquinolinyl)-4-hydrazinyl-CN (CA INDEX NAME)

```
NH-NH2
ΤТ
     111826-43-8P 111826-49-4P 111826-50-7P
     111826-51-8P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and trypanocidal activity of)
     111826-42-7P 111826-44-9P 111826-45-0P
     111826-46-1P 111826-47-2P 111826-48-3P
     111826-52-9P 111826-53-0P 111826-54-1P
     111826-55-2P 111826-56-3P 111826-57-4P
     111826-58-5P 111826-59-6P 111826-60-9P
     111826-61-0P 111826-62-1P 111826-63-2P
     111852-19-8P 111852-20-1P 111910-96-4P
     111941-88-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
     111826-40-5P
     RL: SPN (Synthetic preparation); PREP (Preparation)
       (preparation, chlorination, borohydride reduction, and trypanocidal
activity of)
    111826-41-6P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation, reactions and trypanocidal activity of)
OS.CITING REF COUNT:
                              THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
                               (1 CITINGS)
L4 ANSWER 11 OF 15 CA COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                         105:133726 CA
ORIGINAL REFERENCE NO.:
                        105:21577a,21580a
TITLE:
                         Isoquinolylquinoline derivatives. Part III.
                         Synthesis of some 4-substituted
                         3-(3', 4'-dihydro-1'-isoquinoly1)quinoline derivatives
                         as possible antifilarial agents
AUTHOR(S):
                         Chakravorti, S. S.; Sen Gupta, Pranab K.; Chaudhuri,
                         Subhankar; Das, Michael; Bhattacharva, Sipra;
                         Chaudhuri, P. K.; Bose, A. N.
CORPORATE SOURCE:
                         Bengal Immun. Res. Inst., Calcutta, 700 017, India
                         Indian Journal of Chemistry, Section B: Organic
SOURCE:
                         Chemistry Including Medicinal Chemistry (1985),
                         24B(7), 737-46
CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE:
                         Journal
```

English

CASREACT 105:133726

LANGUAGE:

OTHER SOURCE(S):

Bischler-Napieralski cyclization of quinolinyl amides I (R1 = OMe, R2 = R3 AB = H; R1 = R3 = H, R2 = OMe; R1 = R2 = H, R3 = OM) using polyphosphonic acid or polyphosphonic acid-POC13 gave isoquinolylquinolines II (R4 = OH, R5 = H). II (R1 = R2 = H, R3 = OMe, R4 = OH) was converted in several steps to III (R = HCl). III.HCl had significant antifilarial activity. ΙT 24489-66-5

RL: RCT (Reactant); RACT (Reactant or reagent) (condensation of, with acetamido(diethylamino)cresol)

RN 24489-66-5 CA

CN Quinoline, 4,7-dichloro-3-(3,4-dihydro-1-isoquinoliny1)- (CA INDEX NAME)

24489-66-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(condensation of, with acetamido(diethylamino)cresol) 104386-33-6P 104386-34-7P 104386-35-8P

104386-39-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

```
(preparation and antifilarial activity of)
     28970-37-8P
     RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT
     (Reactant or reagent)
        (preparation and reaction of, with phosphorus oxychloride, chloroquinoline
     104386-06-3P 104386-07-4P 104386-26-7P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reactions of)
ΙT
     24489-60-9P 104386-04-1P 104386-05-2P
     104386-08-5P 104386-09-6P 104386-10-9P
     104386-11-0P 104386-12-1P 104386-13-2P
     104386-14-3P 104386-15-4P 104386-17-6P
     104386-18-7P 104386-19-8P 104386-20-1P
     104386-21-2P 104386-22-3P 104386-23-4P
     104386-24-5P 104386-25-6P 104386-27-8P
     104386-28-9P 104386-29-0P 104386-30-3P
     104386-31-4P 104386-32-5P 104386-36-9P
     104386-37-0P 104386-38-1P 104386-40-5P
     104386-41-6P 104386-42-7P 104386-43-8P
     104386-44-9P 104386-45-0P 104386-46-1P
     104386-47-2P 104386-48-3P 104386-49-4P
     104386-50-7P 104386-51-8P 104386-52-9P
     104386-53-0P 104386-54-1P 104406-74-8P
     108779-02-8P
    RL: SPN (Synthetic preparation); PREP (Preparation)
       (preparation of)
OS.CITING REF COUNT:
                              THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
                               (2 CITINGS)
   ANSWER 12 OF 15 CA COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                        73:55947 CA
ORIGINAL REFERENCE NO.: 73:9189a,9192a
TITLE:
                        Isoquinolylquinoline derivatives. II. Synthesis of
                        some azaheterocyclic derivatives as possible
                        antispasmodic or amoebicidal agents
AUTHOR(S):
                        Das Gupta, Ahindra C.; Raychaudhuri, Amitabha;
                        Chakravorti, Sibani S.; Basu, U. P.
CORPORATE SOURCE:
                        Bengal Immunity Res. Inst., Calcutta, India
SOURCE:
                        Indian Journal of Chemistry (1970), 8(6), 505-8
                        CODEN: IJOCAP: ISSN: 0019-5103
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        English
GT
    For diagram(s), see printed CA Issue.
     I-VI were prepared I was synthesized by Bischler-Napieralski cyclization of
AB
     4-hydroxy-N-(\alpha-methyl)]-3-quinolinecarboxamide, obtained by
     the interaction of Et 4-hydroxy-3-quinolinecarboxylate with
     α-methylphenethylamine. II was obtained by a similar cyclization of
     4-hydroxy-N-(2-phenylcyclohexyl)-3-quinolinecarboxamide, obtained by the
     interaction of ethyl 4-hydroxy-3-quinolinecarboxylate and
     2-phenylcyclohexylamine. III-VI were obtained by the interaction of
     3-(3,4-dihydro-1-isoguinolyl)-4,7-dichloroguinoline with piperidine.
     morpholine, 1-carbethoxypiperazine, and 1-benzylpiperazine, resp.
    28970-37-8P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
```

RN 28970-37-8 CA 4-Ouinolinol, 3-(3,4-dihvdro-3-methvl-1-isoquinolinvl)- (CA INDEX NAME) CN OH 28970-37-8P 28970-38-9P 28970-40-3P

28970-41-4P 28970-42-5P 28970-58-3P 28970-59-4P 28970-60-7P 28970-61-8P 28970-62-9P 28970-63-0P 28970-64-1P 28970-65-2P 29141-83-1P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

ANSWER 13 OF 15 CA COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 72:12529 CA ORIGINAL REFERENCE NO.: 72:2273a,2276a

TITLE:

AUTHOR(S):

Isoquinolylquinoline derivatives. I. Synthesis of some 3-(3,4-dihydroisoguinol-1-v1-4-substituted quinoline derivatives as possible spasmolytic agents Chakravorti, Sibani; Das Gupta, Ahindra C.;

Raychaudhuri, Amitabha; Basu, Uma P. CORPORATE SOURCE:

Bengal Immunity Res. Inst., Calcutta, India SOURCE: Indian Journal of Chemistry (1969), 7(10), 1010-16 CODEN: IJOCAP; ISSN: 0019-5103

DOCUMENT TYPE: Journal

LANGUAGE: English

GI For diagram(s), see printed CA Issue. AB

Bischler-Napieralski cyclizations of the amides (Ia or Ic), from the reaction of phenethylamine with Et 4-hydroxy-3-quinolinecarboxylate or its 7-chloro derivative with polyphosphoric acid (PPA)-POC13 mixture or PPA alone afforded 3,4-dihydroisoquinolylquinoline derivs., which with POC13 were converted to the corresponding chloro derivs. Ia, with POC13 in boiling benzene or PhMe, gave Ib instead of undergoing the expected cyclodehydration. The reactivity of the Cl atom in the 4-position of the quinoline ring of 3-(3,4-dihydro-1-isoquinoly1)-4-chloroquinoline was ascertained through it s reaction with NaOMe and secondary amines like pyrrolidine, piperidine, morpholine, piperazine, 1-carbethoxy-piperazine, 1-benzylpiperazine, resulting in the formation of the expected azaheterocyclic derivs., some of which show moderately high musculotropic spasmolytic activity. During the dehydrogenation of some of these 3,4-dihydroisoquinolylquinolines with Pd/C, interesting examples of hydrogenolysis by H transfer were recorded.

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

RN 24485-03-8 CA

CN Quinoline, 4,7-dichloro-3-(1-isoquinolinyl)- (CA INDEX NAME)

```
24485-03-8P 24485-04-9P 24485-05-0P
     24485-06-1P 24489-58-5P 24489-59-6P
     24489-60-9P 24489-61-0P 24489-62-1P
     24489-63-2P 24489-64-3P 24489-65-4P
     24489-66-5P 24489-67-6P 24489-68-7P
     24489-69-8P 24489-70-1P 24489-71-2P
     24489-72-3P 24489-73-4P 24489-74-5P
     24489-75-6P 24489-76-7P 24489-77-8P
     24489-78-9P 24489-79-0P 24489-80-3P
     24489-81-4P 24489-82-5P 24489-83-6P
     24489-84-7P 24489-85-8P 24500-86-5P
     24500-87-6P 24500-88-7P 24500-89-8P
     24536-43-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
OS.CITING REF COUNT:
                               THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
                               (1 CITINGS)
    ANSWER 14 OF 15 CA COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                         51:25556 CA
ORIGINAL REFERENCE NO.: 51:5084f-h
TITLE:
                         Heterocyclic compounds. VIII. Synthesis of
                         1-quinolylisoquinolines
AUTHOR(S):
                         Govindan, T. K.
CORPORATE SOURCE:
                         Univ. Madras
SOURCE:
                         Proceedings - Indian Academy of Sciences, Section A
                         (1956), 44A, 126-9
                         CODEN: PISAA7: ISSN: 0370-0089
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         Unavailable
AB
    1-Ouinolv1-3-methv1-3,4-dihvdro-6,7-methvlenedioxyisoquinolines (I) were
     prepared Piperonal condensed with nitroethane and the product reduced with
     LiAlH4 in Et20 gave 3,4-(CH202)C6H3CH:C(NH2)CH3 (II), b17 152°. II
     in C6H6 refluxed with quinolinecarboxylic acid chloride-HCl (III), (or by
     heating II with the Et ester, for R = 4-quinolyl and 7-quinolyl), gave
     3,4-(CH2O2)C6H3CH:C(CH3)NHCOR (IV), which was cyclized by heating with
     POC13 in C6H6 or PhMe to I. The following I were prepared (R, III, m.p. of
     IV, solvent of crystallization, m.p. of picrate, m.p. of I, solvent of
crystallization.
     and m.p. of picrate given): 2-quinolyl, quinaldinic acid, 116°,
     petr. ether, -, 141°, petr. ether, -; 3-quinoly1,
     quinoline-3-carboxylic acid, 110-14°, dilute EtOH (128° when
     dried over P2O5), 182° (from AcOH), 98-100°, dilute MeOH,
     201° (from MeOH); 4-quinolyl, cinchoninic acid, 144°, Me2CO,
```

RN CN

Me

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204° (from EtOH), -, -, 202° (from MeOH); 5-quinoly1,
     quinoline-5-carboxylic acid, 173°, C6H6-petr. ether, -, -, -,
     175° (from EtOH); 6-quinolyl, quinoline-6-carboxylic acid,
     142°, petr. ether, -, 122°, petr. ether, -; 7-quinoly1,
     quinoline-7-carboxylic acid, 165°, Me2CO, -, 140°, petr.
     ether, -; 8-quinolyl, quinoline-8-carboxylic acid, -, -, 177° (from
     PhMe), 164°, MeOH, -.
     109805-16-5P, 1,3-Dioxlo[4,5-g]isoguinoline,
     7,8-dihydro-7-methyl-5-[3-quinolyl]-
     RL: PREP (Preparation)
        (preparation of)
     109805-16-5 CA
     1,3-Dioxolo[4,5-q]isoquinoline, 7,8-dihydro-7-methyl-5-(3-quinolinyl)-
     (CA INDEX NAME)
     109805-16-5P, 1,3-Dioxlo[4,5-g]isoquinoline,
     7,8-dihydro-7-methyl-5-[3-quinolyl]- 116151-51-0P,
     1,3-Dioxlo[4,5-g]isoquinoline, 7,8-dihydro-7-methyl-5-[3-quinolyl]-,
     dipicrates
     RL: PREP (Preparation)
        (preparation of)
    ANSWER 15 OF 15 CA COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                         46:630 CA
ORIGINAL REFERENCE NO.: 46:116q-i
                         Synthesis of compounds related to papaverine, IV.
TITLE:
                         Syntheses of 1-heterocyclic isoguinolines
AUTHOR(S):
                         Fuiisawa, Masao
SOURCE:
                         Yakuqaku Zasshi (1945), 2(No. 9/10A), 2-3
                         CODEN: YKKZAJ; ISSN: 0031-6903
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         Unavailable
     The following 6.7-methylenedioxyisoguinolines with heterocyclic
     substituents in the 1-position were prepared: 1-(2-pyridy1)-3-Me, noncryst.
     (picrate, orange needles, decompose 203°); 1-(3-pyridyl)-3-Me,
     colorless needles, m. 193° (picrate, yellow needles, m.
     199°); 1-(1-methyl-3-piperidyl)-2-methyl-1,2,3,4-tetrahydro
     (picrolonate, yellow needles, decompose 230-1°);
     1-(1-methyl-4-phenyl-4-piperidyl)-3-Me, fine colorless needles, m.
     220° (picrate, yellow needles, m. 228°); 1-(2-quinoly1)-3-Me
     (picrate, yellow needles, m. 223-4°; methiodide, golden yellow
     needles, decompose 230°); 1-(2-phenyl-3-quinolyl)-3-Me, colorless
     prisms, m. 258-9°; 1-(1-piperidylmethyl)-3-Me (picrate, yellow
```

needles, m. 216°); 1 -(3,5-dimethyl-4-isoxazolyl)-3-Me, colorless

needles, m. 147° (HCl salt, pale blue, rhombic crystals, decompose 248.5°); 1-(1,2,3,4-tetrahydro-1-isoquinolylmethyl)-3-methyl-3,4dihydro (picrolonate, orange needles, decompose 251.5°); and 1-(4-methyl-5-thiazolyl)-3-Me (picrate, yellow needles, m. 196°). 854865-61-5P, Quinoline, 3-(7-methyl-1,3-dioxolo[4,5-q]isoquinolin-

5-v1)-2-pheny1-RL: PREP (Preparation) (preparation of)

RN 854865-61-5 CA

CN 1,3-Dioxolo[4,5-g]isoquinoline, 7-methyl-5-(2-phenyl-3-quinolinyl)- (CA INDEX NAME)

854865-61-5P, Quinoline, 3-(7-methyl-1,3-dioxolo[4,5-g]isoquinolin-5-y1)-2-phenyl- 854865-61-5P, 1,3-Dioxolo[4,5-q]isoquinoline, 7-methyl-5-(2-phenyl-3-quinolyl)-RL: PREP (Preparation) (preparation of)

29 ANSWERS

=> d his

(FILE 'HOME' ENTERED AT 14:03:52 ON 28 JUL 2009)

FILE 'REGISTRY' ENTERED AT 14:04:13 ON 28 JUL 2009

FILE 'REGISTRY' ENTERED AT 14:04:27 ON 28 JUL 2009

L1 STRUCTURE UPLOADED

28 S L1 SAM

L3 602 S L1 FULL

FILE 'CA' ENTERED AT 14:04:59 ON 28 JUL 2009 15 S L3 L4

=> file marpat

=> s 11 full

FULL SEARCH INITIATED 14:06:15 FILE 'MARPAT'

FULL SCREEN SEARCH COMPLETED -3795 TO ITERATE

100.0% PROCESSED 3795 ITERATIONS SEARCH TIME: 00.00.02

1.5 29 SEA SSS FUL L1

=> d ibib abs fghit 1-29

L5 ANSWER 1 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 149:288686 MARPAT

Indolines as functionally selective alpha2C adrenoreceptor agonists and their preparation

INVENTOR(S): De Lera Ruiz, Manuel: McCormick, Kevin D.: Bovce, Christopher W.; Aslanian, Robert G.; Yu, Younong; Mangiaracina, Pietro; Zheng, Junying; Berlin, Michael

Y.; Ciesla, Stephanie L.; Huang, Chia-Yu; Liang, Bo PATENT ASSIGNEE(S): Schering Corporation, USA; Pharmacopeia, Inc.

SOURCE: PCT Int. Appl., 145pp.

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PAT | ENT | NO. | | KI | ND | DATE | | | Al | PPLI | CATI | ON NO | э. | DATE | | | | |
|----------|------|------|------|-----|-------------|------|-----|-----|-----|------|------|-------|----------|------|------|-----|-----|--|
| | | | | | | | | | - | | | | | | | | | |
| WO | 2008 | 1004 | 56 | A: | A2 20080821 | | | | W | 20 | 08-U | 5 | 20080211 | | | | | |
| WO | 2008 | 1004 | 56 | A. | A3 20081106 | | | | | | | | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AO, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BH, | BR, | BW, | BY, | ΒZ, | |
| | | CA, | CH, | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DO, | DZ, | EC, | EE, | EG, | ES, | |
| | | FI, | GB, | GD, | GE, | GH, | GM, | GT, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | |
| | | KG, | KM, | KN, | KP, | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LY, | MA, | MD, | |
| | | ME, | MG, | MK, | MN, | MW, | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | |
| | | PL, | PT, | RO, | RS, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | TJ, | TM, | |
| | | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | ZA, | ZM, | ZW | | | | |
| | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HR, | HU, | |
| | | ΙE, | IS, | IT, | LT, | LU, | LV, | MC, | MT, | NL, | NO, | PL, | PT, | RO, | SE, | SI, | SK, | |
| | | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | |
| | | TG, | BW, | GH, | GM, | KΕ, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | |
| | | AM, | AZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | TM, | AP, | EA, | EP, | OA | | | | |
| PRIORITY | APP | LN. | INFO | . : | | | | | U | S 20 | 07-9 | 0104 | 5P | 2007 | 0213 | | | |

The invention provides a class of biaryl compds. of formula I as inhibitors of $\alpha 2C$ adrenergic receptor agonists, methods of preparing such compds., pharmaceutical compns. containing one or more such compds., methods of preparing pharmaceutical formulations comprising one or more such compds., and methods of treatment, prevention, inhibition, or amelioration of one or more conditions associated with the lpha 2C adrenergic receptors

ΤТ

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using such compds. or pharmaceutical compns. Compds. of formula I wherein J1, J2 and J3 is N, NO and CR2; J4 is (un)substituted alkylidene, (un) substituted alkenylmethylene, (un) substituted alkyl, etc.; J5 is CR6', NR6', O and S; R1 is (un) substituted cycloalkyl, (un) substituted cycloalkenyl, (un)substituted (hetero)aryl, etc.; R2 is H, OH, halo, CN, NO2, alkyl, alkoxy, etc.; R3 is H, halo, =0, alkyl, alkoxy, alkenyl, etc.; R6' is H, alkyl, alkoxy, alkenyl, alkynyl, etc.; X is C1-3 alkyl, and C1-3 alkenyl; m is 0, 1, 2, 3, 4, and 5; and their pharmaceutically acceptable salts, esters, solvates and prodrugs thereof, are claimed. Example compound II was prepared by Suzuki cross-coupling reaction of N-Boc-6-bromoindoline with pyrimidine-5-boronic acid the resulting N-Boc-6-(pyrimidin-5-yl)indoline underwent deprotection to give 6-(pyrimidin-5-yl)indoline, which underwent reductive alkylation with imidazole-4-carboxaldehyde to give compound II. All the invention compds. were evaluated for their α2C adrenoreceptor agonistic activity (some data given).

MSTR 1A

G1 = 8-2 9-7 8-4

g3—g4

G2 = CH (opt. substd.) G3 = 103-2 102-4 104-9

103 104

G11 = isoquinolinyl

Patent location: claim

Note: or pharmaceutically acceptable salts, esters,

solvates or prodrugs
Note: substitution is restricted

Note: additional substitution and ring formation also

claimed

L5 ANSWER 2 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:578981 MARPAT

TITLE: Soil- or seed-treating agents comprising quinoline

compounds and salts thereof and plant disease control

with quinolines

INVENTOR(S): Ito, Hiroyuki; Tamagawa, Yasushi; Tanaka, Harukazu;

10/587100

Ohara, Toshiaki

PATENT ASSIGNEE(S): Sankyo Agro Company, Limited, Japan

SOURCE: PCT Int. Appl., 70pp.

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| | | | | KIND DATE | | | | APPLICATION NO. DATE | | | | | | | | | |
|---------|------------|------|------|-----------|-----|------|---------|----------------------|-----|------|-------|-------|-----|------|------|-----|-----|
| PA | PATENT NO. | | | | | DATE | | | A | PPLI | CATI | M MC | 0. | DATE | | | |
| | | | | | | | | | - | | | | | | | | |
| WO | 2008 | 0661 | 48 | A | 1 | 2008 | 0605 | | W | 20 | 07-J | P731 | 43 | 2007 | 1130 | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BH, | BR, | BW, | BY, | BZ, | CA, |
| | | CH, | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DO, | DZ, | EC, | EE, | EG, | ES, | FI, |
| | | GB, | GD, | GE, | GH, | GM, | GT, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, |
| | | KM. | KN, | KP, | KR. | KZ, | LA, | LC, | LK, | LR, | LS, | LT. | LU, | LY, | MA, | MD, | ME, |
| | | MG, | MK. | MN. | MW. | MX. | MY. | MZ. | NA. | NG, | NI, | NO. | NZ, | OM. | PG, | PH, | PL, |
| | | PT. | RO. | RS. | RU. | SC. | SD. | SE. | SG. | SK. | SL. | SM. | SV. | SY, | TJ. | TM. | TN. |
| | | | | | | UG, | | | | | | | | | | | |
| | RW: | | | | | | | | | | | | | GB, | GR. | HU. | IE. |
| | | | | | | | | | | | | | | SI, | | | |
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| | | | | | | | | | | | | | | ZM. | | | |
| | | | | | | RU. | | | , | | , | , | , | | | , | , |
| An | 2007 | | | | | | | | A | 1 20 | 07-3 | 2641: | 2 | 2007 | 1130 | | |
| | 2009 | | | | | 2009 | | | | | | 1241 | _ | 2009 | | | |
| PRIORIT | | | | | | 2005 | 0 / 1 / | | | | | 2534 | | 2006 | | | |
| FRIORII | I ALL | ыч. | TIME | • • | | | | | | | | | | 2007 | | | |
| GI | | | | | | | | | ** | J 20 | 0 7-0 | 731 | 40 | 2007 | 1130 | | |
| GT | | | | | | | | | | | | | | | | | |

AB Soil- or seed-treating agents with an excellent controlling effect against various plant pathogens (particularly, Pyricularia oryzae) comprise ≥ 1 quinoline (I, e.g., where R1, R2 = (un)substituted alkyl, (hetero)aryl, etc.; R3, R4 = H, (un)substituted alkyl, halo, alkoxy, etc.; X = halo, (un)substituted alkyl, etc.; Y = halo, OH, etc.; n = 0-4; m = 0-6) or a salt thereof. Thus, when rice plants which had been sprayed with a Pyricularia oryzae spore suspension were grown on soil treated with 400 g/10 are of I (R1, R2 = Me; R3, R4 = H; Xn = 5-F; Ym = H), rice blast disease development was not observed 7 days after inoculation.

MSTR 1

$$G2 = 22$$

Patent location: claim 1 Note: or salts

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 148:517739 MARPAT
TITLE: Preparation of triazolopyridazine prot

Preparation of triazolopyridazine protein kinase modulators

INVENTOR(S): modulator:
Smith, Ch:

Smith, Christopher Ronald; Bounaud, Pierre-Yves; Jefferson, Elizabeth Anne; Lee, Patrick S.; Torres, Eduardo

PATENT ASSIGNEE(S): SGX Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 284pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

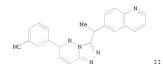
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:

| PZ | PATENT NO. | | | KIND DATE | | | | | | | | | | | | | |
|----|--------------------------------------|----------------------|-----------------|------------|------------|------------|--------------|------------|----------------------------|--|--------------------------------------|--|---------------------|--|--------------------------------------|------------|------------|
| | WO 2008051805
WO 2008051805 | | | | | 20080502 | | | | | | | | 2007 | 1018 | | |
| | W: | CH,
GB, | CN,
GD, | CO,
GE, | CR,
GH, | CU,
GM, | CZ, | DE,
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HR, | DM,
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ID, | DZ,
IL, | EC,
IN, | BW,
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KE, | FI,
KG, |
| | | MG,
PT, | MK,
RO, | MN,
RS, | MW,
RU, | MX, | MY,
SD, | MZ,
SE, | NA,
SG, | NG,
SK, | NI,
SL, | NO,
SM, | NZ,
SV, | LY,
OM,
SY, | PG, | PH, | PL, |
| | RW: | IS,
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GW, | PT,
ML, | RO,
MR, | SE,
NE, | GB,
SI,
SN,
ZM, | SK,
TD, | TR,
TG, | BF,
BW, |
| K | J 2007
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FY APP | 3092
0693
MN00 | 37
03
857 | A
A | 1 | 2009 | 0502
0630 | | AI
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UI | U 20
R 20
N 20
S 20
S 20
S 20 | 07-3
09-7
09-M
06-8
06-8 | 0923
0798
N857
6255
7138
1375 | 6
2P
4P
2P | 2007
2009
2009
2006
2006
2007 | 0417
0501
1023
1221
0424 | | |
| | | | | | | | | | | | | | | 2007 | | | |

GI

$$\begin{bmatrix} R^{31} & & & \\ & & & \\ & & & \\ & & & \\ R^{1} & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$



AB The title compds. I [A = (un)substituted (hetero)aryl; Q = H, halo, amino, alkyl, etc.; T = CH2, CH(halo), C(halo)2, CH(alkyl), C(alkyl)2; X = N or

CR2; R1, R2 = H, halo, nitro, cyano, etc.; or R1 and R2 form (un)substituted (hetero)cyloalkyl or (hetero)aryl; R31, R32 = H, halo, nitro, cyano, etc.; R4 = a bond, H, halo, nitro, etc.; z = 0–3], useful for treating diseases mediated by kinase activity, were prepared Thus, Pd-catalyzed coupling of (R,S)-6-[1-(6-chloro-[1,2,4]triazolo[4,3-b]pyridazin-3-yl)ethyl|quinoline with 3-cyanophenylboronic acid afforded 55% II which showed TC50 of \leq 100 nM against c-Met kinase. Pharmaceutical composition composition to compound I is disclosed.

MSTR 1

G1 = isoquinolinyl

Patent location: claim 1

Note: or pharmaceutically acceptable salts or solvates

Note: also incorporates claims 23, 25 and 27
Note: substitution is restricted

Stereochemistry: or enantiomers, diastereomers or racemates

L5 ANSWER 4 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 147:462227 MARPAT

TITLE: Medical fungicides containing 3-[(di- or tetrahydro)isoquinolin-1-yl]quinolines

INVENTOR(S): Ito, Hiroyuki; Tamagawa, Yasushi
PATENT ASSIGNEE(S): Sankyo Agro Co., Ltd., Japan

SOURCE: Sankyo Agro CO., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 54pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|----------|
| | | | | |
| JP 2007269686 | A | 20071018 | JP 2006-96830 | 20060331 |
| PRIORITY APPLN. INFO. | : | | JP 2006-96830 | 20060331 |
| GI | | | | |

AB Medical fungicides contain title compds. I, II [R1, R2 = (un)substituted C1-6 alkyl, (un)substituted (hetero)aryl, (un)substituted aralkyl; R1CR2 may be linked to form (un)substituted C3-10 cycloalkyl; R3, R4 = H, (un)substituted C1-6 alkyl, halo, C1-6 alkoxy, OH; R3R4 may be linked to form C1-6 alkylidene; R3CR4 may be keto, (un)substituted C3-10 cycloalkyl; R5 = none, H, acyl, (un)substituted C1-6 alkyl, O; X = halo, (un)substituted C1-6 alkyl, (un)substituted C1-6 alkyl, (un)substituted C1-6 alkyl, (un)substituted C1-6 alkyl, (un)substituted (hetero)aryl, etc.; Y = halo, C1-6 alkyl, C1-6 alkoxy, OH; n = 0-4; m = 0-6; the doted line may be double bondl, or their salts as active ingredients. Thus, I (R1 = R2 = Me, R3 = R4 = Ym = H, R5 = none, Xn = 5-F; the doted line is double bondl at 100 ppm showed ≥80% antifungal activity against Candida glabrata, Cryptococcus neoformans, and Aspergillus fumigatus, and at 10 ppm against Trichophyton mentagrophytes, T. rubrum, and Microsporrum qypseum.

MSTR 1

G1 = 60-17 19-20 60-2

G12

Patent location: claim 1 Note: or salts

L5 ANSWER 5 OF 29 MARPAT COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 146:358717 MARPAT

TITLE: Preparation of cyanophenylethyl quinolinecarboxamides as neurokinin-3 (NK-3) receptor liquads.

INVENTOR(S): Albert, Jeffrey S.; Alhambra, Cristobal; Kang, James; Koether, Gerard M.; Simpson, Thomas R.; Woods, James;

PATENT ASSIGNEE(S): Astrazeneca AB, Swed.

SOURCE: PCT Int. Appl., 39pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PA: | | NO. | | KI | ND | DATE | | | Al | PPLI | CATI | и ис | ٥. | DATE | | | |
|-----|------|------|-----|-----|-----|------|------|-----|-----|------|--------|------|-----|------|------|-----|-----|
| WO. | | 0351 | | A | 1 | 2007 | 0329 | | W | 20 | 06-S | E106 | 7 | 2006 | | | |
| | W: | AE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KN, | KP, |
| | | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, |
| | | MW, | MX, | MY, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RS, |
| | | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, | SV, | SY, | ΤJ, | TM, | TN, | TR, | TT, | TZ, |
| | | UA, | UG, | US, | UZ, | VC, | VN, | ZA, | ZM, | ZW | | | | | | | |
| | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, |
| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, |
| | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | AZ, | BY, |
| | | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | | | | | | | |
| EP | 1928 | 834 | | A. | 1 | 2008 | 0611 | | E | P 20 | 06 - 7 | 8418 | В | 2006 | 0919 | | |

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R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR
                            20090305
                                           JP 2008-532189
     JP 2009508945
                       Т
                                                             20060919
     IN 2008DN02404
                       Α
                            20080725
                                           IN 2008-DN2404
                                                             20080320
     CN 101268053
                       Α
                            20080917
                                           CN 2006-80035003 20080321
     US 20080306110
                       A1
                            20081211
                                           US 2008-67566
                                                             20080408
PRIORITY APPLN. INFO.:
                                           US 2005-719286P
                                                             20050921
                                           WO 2006-SE1067
                                                            20060919
OTHER SOURCE(S):
                       CASREACT 146:358717
```

 $\begin{array}{c} R^1 & A(R^2)_n \\ \\ O & NH \\ \\ (R^5)_q & \\ \end{array}$

AB Title compde. [I, Rl = CH2CN, A = Ph, cycloalky], R2 = H, OH, NH2, cyano, halo, (substituted) alkyl cycloalkyl, alkoxy, alkoxyalkyl, R3 = R2, NO2; m, n, q = 1-3; R4 = H, OH, OSO2R6, (substituted) alkyl, alkoxy, alkoxyalkyl, etc.; R5 = H, OH, cyano, halo, OR6, SR6, SOR6, SO2R6; R6 = H, (substituted) alkyl, alkenyl, alkynyl, carbocyclyl], were prepared for treatment of depression, anxiety, schizophrenia, obesity, inflammatory bowel disorder, etc. (no data). Thus, 3-hydroxy-2-phenylquinoline-4-carboxylic acid, Et3N, and SOC12 were stirred together in BtOAc for 45 min; (S)-3-maino-3-phenylpropionitrile (preparation given) was added followed by stirring for 3 h at 40° to give (S)-2-cyano-1-phenylethyl 3-hydroxy-2-phenylquinoline-4-carboxamide.

Ι

MSTR 1

G4 = 51

_G12-G13

G12 = (0-5) CH2G13 = isoquinolinyl

Patent location:

claim 1 Note: or in vivo hydrolysable precursors, pharmaceutically acceptable salts

Stereochemistry: or stereoisomers or enantiomers

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 146:163036 MARPAT

TITLE: Preparation of 3-(isoquinolin-1-v1)quinoline derivatives as agrochemical and horticultural

fungicides

Ito, Hiroyuki; Komai, Hiroyuki; Fujiwara, Kota; INVENTOR(S): Tanaka, Harukazu; Tamagawa, Yasushi; Kajino, Fumie

PATENT ASSIGNEE(S): Sankyo Agro Company, Limited, Japan

SOURCE: PCT Int. Appl., 114pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| P | ATE | ENT | NO. | | KI | ND | DATE | | | Al | PPLI | CATI | ON NO | ο. | DATE | | | |
|------|-----|------|------|-------|-----|-----|------|------|-----|-----|------|--------|-------|-----|------|------|-----|-----|
| | | | | | | | | | | | | | | | | | | |
| W | 0 2 | 2007 | 0110 | 22 | A | 1 | 2007 | 0125 | | W | 20 | 06-J | P314 | 478 | 2006 | 0721 | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | | CN, | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | | GE, | GH, | GM, | HN, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KN, | KP, |
| | | | KR, | KZ, | LA, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, |
| | | | MW, | MX, | MZ, | NA, | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RS, | RU, |
| | | | SC, | ŞD, | SE, | SG, | SK, | SL, | SM, | SY, | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, |
| | | | US, | UZ, | VC, | VN, | ZA, | ZM, | ZW | | | | | | | | | |
| | | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, |
| | | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | ВJ, |
| | | | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | | KG, | KΖ, | MD, | RU, | TJ, | TM | | | | | | | | | | |
| ORI' | ΤY | APP | LN. | INFO. | . : | | | | | JI | P 20 | 05 - 2 | 1232 | 4 | 2005 | 0722 | | |

PRIORITY APPLN. INFO.: JP 2005-212324 20050722 GI

$$R^{2}$$
 R^{1} R^{2} R^{3} R^{4} R^{4}

The title compds. (I) [the ring A, B = each (un)substituted benzene ring, AB C3-8 cycloalkyl ring optionally unsatd., or 5- or 6-membered heteroaryl ring containing 1-4 heteroatoms selected from O, N and S; R1-R4 = H, halogen, HO, acyloxy, acylthio, cyano, each (un)substituted C1-6 alkyl, C1-6 alkoxy, C1-6 alkylthio, C1-6 alkylsulfinyl, C1-6 alkylsulfonyl, C3-6 cycloalkyl, C3-6 cycloalkyloxy, C3-6 cycloalkylthio, C2-6 alkenyl, C2-6 alkenyloxy, C2-6 alkenylthio, C2-6 alkynyl, C2-6 alkynyloxy, C2-6 alkynylthio, aryl, arylthio, heteroaryl, heteroarylthio, aralkyl, aralkyloxy, or aralkylthio; or at least 2 of R1-R4 together form (un) substituted C3-8 cycloalkyl ring optionally containing 1-3 heteroatoms selected from O, N, and S; or (R3 and R4) or (R3 and R4) together represent oxo; (R1 and R2) or (R3 and R4) together represent CH2; or (R1 and R3 or R4) or (R2 and R3 or R4) together represent a single bond; O = N, (un) substituted NH; when n = an integer of 2-4, X = group A, O-(un)substituted N-hydroxy-C1-6 alkanimidoyl; when m = an integer of 2-6, Y = group A, HO; group A = halo, each (un)substituted C1-6 alkyl, C3-6 cycloalkyl, C2-6 alkenyl, C2-6 alkynyl, aryl, heteroaryl, C1-6 alkylthio, C1-6 alkylsulfinyl, C1-6 alkylsulfonyl, or NH2, acyl, cyano; n = an integer of 0-4; m = an integer of 0-61 or salts thereof are prepared These compds. show an excellent effect on a variety of plant pathogens, particularly for rice blast (Pyricularia oryzae), without causing damage to a host plant. Thus, 230 mg 2-chloroquinoline-3-carbonitrile and 350 mg 3-(2-fluorophenyl)-2,3-dimethylbutan-2-ol were added to 1.0 mL H2SO4 and stirred at room temperature for 1 h. The reaction mixture was poured into H2O and

made alkaline by adding aqueous NH3 solution and extracted with EtOAc to give, after

purification by TLC, 9% 2-chloro-3-(5-fluoro-3,3,4,4-tetramethyl-3,4-dihydroisoquinolin-1-yl)quinoline (II). II and 3-(5-fluoro-3,4-dihydroisoquinolin-1-yl)quinoline at 300 ppm completely controlled Botrytis cinerea on tomato seedlings and Pyricularia oryzae on rice seedlings, resp.

MSTR 1

G11 = o-C6H4 (opt. substd. by 1 or more G26) G12 = 2-148 1-5

G13 G13

G13 = 36

G14 36 G14

TITLE:

Patent location: claim 1 Note: or salts

Note: substitution is restricted

Note: additional ring formation also claimed

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER:

146:45396 MARPAT
Preparation of bis-hetero/aryls, particularly
bis-indoles, for treatment of protein folding

disorders

INVENTOR(S): Carter, Michael D.; Hadden, Mark; Weaver, Donald F.;

Jacobo, Sheila Marie H.; Lu, Erhu

PATENT ASSIGNEE(S): Queen's University At Kingston, Can.

SOURCE: PCT Int. Appl., 251pp.

SOURCE: PCT Int. Appl., 2 CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COU PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| | | | | |
| WO 2006125324 | A1 | 20061130 | WO 2006-CA878 | 20060529 |

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            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
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            MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
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            VN, YU, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
            IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
            CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
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            KG, KZ, MD, RU, TJ, TM
    AU 2006251832
                    A1
                         20061130
                                         AU 2006-251832 20060529
    CA 2609980
                     A1
                          20061130
                                         CA 2006-2609980 20060529
    EP 1893576
                          20080305
                                        EP 2006-752731 20060529
                      A1
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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    JP 2008545663
                    Т
                          20081218
                                         JP 2008-512659 20060529
    US 20070015813
                     A1 20070118
                                          US 2006-443396
                                                           20060530
                    A 20080627
    IN 2007DN09094
                                         IN 2007-DN9094
                                                          20071126
                                          US 2005-685369P 20050527
PRIORITY APPLN. INFO.:
                                          US 2005-685609P 20050527
                                          US 2005-685610P 20050527
                                          US 2005-709474P 20050819
                                          US 2005-719615P 20050922
                                          US 2006-788519P 20060331
                                          WO 2006-CA878
                                                          20060529
AR
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The invention is related to a method for treating a protein folding disorder such as Alzheimer's disease, dementia, Parkinson's disease, Huntington's disease and prion-based spongiform encephalopathy by administering to a subject a compound of formula A(CR1R2)nB [I; A, B = independently a mono- or bicyclic hetero/arvl group optionally substituted with 1-4 substituents; n = 0-1; when n = 1, R1, R2 = independently H, cyclo/alkyl, alkoxy, hydroxy, halo, aryl], its analog or its pharmaceutically acceptable salt, particularly a bis-indole. invention is also related to the use of I as protein aggregation inhibitors. Thus, reacting 5-bromoisatin with 5-bromoindole, followed by reduction, and treatment of the bis-indole with NaOMe/MeOH in DMF in presence of CuI gave 5-methoxy-3-(5-methoxyindol-3-yl)indole. In a β -amyloid (Aβ) thioflavin T (ThT) aggregation fluorescence assay, selected biaryls I inhibited the aggregation of Aβ1-40 and Aβ1-42. In fluorescence assays, I inhibited the aggregation of tau441 and a-synuclein protein.

MSTR 1

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Ģ1---G2
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= isoquinolinvl = quinolinvl

Patent location:

claim 1 Note:

or pharmaceutically acceptable salts also incorporates claim 65

Note:

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:314837 MARPAT

TITLE: Preparation of

> 6-heteroarv1-1, 2, 3, 4, 4a, 10b-hexahvdrophenanthridines as PDE-4 inhibitors for the treatment of respiratory

disorders

INVENTOR(S): Kautz, Ulrich; Schmidt, Beate; Flockerzi, Dieter; Chiesa, Maria Vittoria; Hatzelmann, Armin; Zitt,

Christof; Wohlsen, Andrea; Marx, Degenhard; Kley, Hans-Peter

PATENT ASSIGNEE(S): Altana Pharma A.-G, Germany

SOURCE: PCT Int. Appl., 57pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM AU 2006219862 A1 20060908 AU 2006-219862 20060301 CA 2598858 A1 20060908 CA 2006-2598858 20060301 EP 1856092 A1 20071121 EP 2006-708589 20060301 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU JP 2008531654 T 20080814 US 20080167316 A1 20080710 JP 2007-557506 20060301 US 2007-884935 20070918 PRIORITY APPLN. INFO.: EP 2005-101589 20050302 WO 2006-EP60370 20060301

OTHER SOURCE(S): CASREACT 145:314837

GI

6-Heteroary1-1, 2, 3, 4, 4a, 10b-hexahydrophenanthridines (shown as I; AB variables defined below; e.g. (4aR*,10bR*)-9-(2,2-difluoroethoxy)-6-(2methylsulfanylpyrimidin-5-yl)-8-methoxy-1,2,3,4,4a,10bhexahydrophenanthridine (1)) are novel effective PDE4 inhibitors (no data) useful against respiratory (airway) disorders (no data). For I: either R1 is hydroxy, 1-4C-alkoxy, 3-7C-cycloalkoxy, 3-7C-cycloalkylmethoxy, or completely or predominantly F-substituted 1-4C-alkoxy, and R2 is 2.2-difluoroethoxy; or R1 is 2.2-difluoroethoxy, and R2 is hydroxy. 1-4C-alkoxy, 3-7C-cycloalkoxy, 3-7C-cycloalkylmethoxy, or completely or predominantly F-substituted 1-4C-alkoxy; and R3 is H or 1-4C-alkyl, R31 is H or 1-4C-alkyl, or in which R3 and R31 together are a 1-4C-alkylene group; R4 is H or 1-4C-alkyl; R5 is H; R51 is H, or R5 and R51 together = addnl. bond. Har is (un)substituted by R6 and/or R7 and/or R8, and is a 5- to 10-membered monocyclic or fused bicyclic unsatd. or partially saturated heteroaryl radical comprising 1 to 4 heteroatoms = 0, N and S; R6 is halogen, 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxy-2-4C-alkoxy, 1-4C-alkylthio, mercapto, cyano, 1-4C-alkoxycarbonyl, carboxy, hydroxy, oxo, -AN(R61)R62, pyridyl, or completely or partially F-substituted 1-4C-alkyl, in which A is a bond or 1-4C-alkylene, R61 is H or 1-4C-alkyl, R62 is H or 1-4C-alkyl, or R61 and R62 together and with inclusion of the N atom, to which they are attached, form a heterocyclic ring; R7 = 1-4C-alkyl, 1-4C-alkoxy, 1-4C-alkoxy-2-4C-alkoxy, 1-4C-alkylthio, mercapto, hydroxy, oxo, amino or mono- or di-1-4C-alkylamino; and R8 is halogen, 1-4C-alkyl or 1-4C-alkoxy. Although the methods of preparation are not claimed, prepns. and/or characterization data for 5 examples of I are included. For example, 1 was prepared (31% over 2 steps) by cyclization of [(1R*, 2R*)-2-[3-(2, 2-difluoroethoxy)-4-methoxyphenyl]cyclohexyl]amine with 2-methylsulfanylpyrimidine-5-carboxylic acid using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride and PC15; preparation of the cyclohexylamine required 6 steps starting from isovanillin and 2-bromo-1,1-difluoroethane.

MSTR 1

G8 = quinolinyl

Patent location:

Note: substitution is restricted

Note: additional oxo substitution also claimed
Note: and salts, N-oxides, and salts of the N-oxides

claim 1

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 9 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:314823 MARPAT

TITLE: Preparation of 3-(2-naphthyl)pyridines and related compounds as human corticoid synthases CYP11B1 and

CYP11B2 inhibitors
INVENTOR(S): Hartmann, Rolf W.;

INVENTOR(S): Hartmann, Rolf W.; Voets, Marieke; Mueller-Vieira, Ursula

PATENT ASSIGNEE(S): Universitaet des Saarlandes, Germany

SOURCE: PCT Int. Appl., 92pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATEN | NO. | | CIND | | | | Al | PPLI | CATI | ON NO | ٥. | DATE | | | |
|------------|---------|--------|--------|------|------|-----|-----|------|------|-------|------|------|------|-----|-----|
| WO 20 | 0609243 | 30 | A1 | | | | W | 20 | 06-E | 2604 | 10 | 2006 | 0302 | | |
| W | AE, | AG, A | , AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | CN, | CO, C | R, CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FΙ, | GB, | GD, |
| | GE, | GH, G | 1, HR | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | KM, | KN, | KP, | KR, |
| | ΚZ, | LC, L | LR, | LS, | LT, | LU, | LV, | LY, | MA, | MD, | MG, | MK, | MN, | MW, | MX, |
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| | SG, | SK, S | , SM | SY, | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, |
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| R | V: AT, | BE, B | G, CH | CY, | CZ, | DE, | DK, | EE, | ES, | FΙ, | FR, | GB, | GR, | HU, | IE, |
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| | | KE, L | | | | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | KZ, M | | | | | | | | | | | | | |
| | 2005009 | | | | | | | | | | | 7052 | | | |
| DE 10: | 2005029 | 372 | A1 | 2007 | 0104 | | D | E 20 | 05-1 | 0200 | 5029 | 3722 | 0050 | 624 | |
| EP 18: | 3261 | | A1 | 2007 | 1114 | | E | P 20 | 06-7 | 0861 | 1 | 2006 | 0302 | | |
| R | AT, | BE, B | G, CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FΙ, | FR, | GB, | GR, | ΗU, | IE, |
| | IS, | IT, L | I, LT | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR | |
| PRIORITY A | PPLN. 1 | NFO.: | | | | | D | E 20 | 05-1 | 0200 | 5009 | 7052 | 0050 | 303 | |

DE 2005-10200502937220050624 WO 2006-EP60410 20060302

GT

AB Title compds. I [Z = [C]n; n = 0-2; Y = 0, S, NR10, etc.; T, U, V, W, X = C, N; R1, R2 = H, halo, CN, etc.; R3 = monocyclic or bicyclic heteroaryl ring with provisos; R4, R5, R6, R7, R8 = H, halo, CN, etc.; R10 = H, alkyl, akylcarbonyl, etc.] and their pharmaceutically acceptable salts were prepared For example, claimed naphthylpyridine II was prepared from 6-bromo-2-methoxynaphthalenein 2-steps. In human CYP11B2 inhibition assays, 46-examples of compds. I at 500 nM exhibited 16-97% inhibition.

MSTR 1

G1-G21

G1 = 226

G2 = N / CH G9 = (0-1) CH2 G21 = isoquinolinyl

G34 = o-C6H4

Patent location: claim 1

Note: also incorporates claim 14
Note: substitution is restricted

Note: or pharmaceutically acceptable salts and isomers

additional substitution also claimed

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

Note:

ACCESSION NUMBER: 145:314821 MARPAT

TITLE: Preparation of 3-(2-naphthyl)pyridines and related compounds as human corticoid synthases CYP11B1 and

CYP11B2 inhibitors

INVENTOR(S): Hartmann, Rolf W.; Voets, Marieke; Mueller-Vieira,

Ursula

PATENT ASSIGNEE(S): Universitaet des Saarlandes, Germany

SOURCE: Ger. Offen., 50pp.

CODEN: GWXXBX
DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| | PAT | ENT | NO. | | KI | ND | DATE | | | Al | PPLI | CATI | ON N | 0. | DATE | | | |
|-------|------|--------------|-----|-----|-----|-----|--------------|------|-----|-----|------|------|------|------|------|------|-----|-----|
| | | 1020
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2006 | | | | | | | | | | | |
| | | W: | | | | | AT, | | | | | | | | | | | |
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| | | | KG. | KZ. | MD. | RU. | TJ. | TM | | | | | | | | | | |
| | ΕP | 1853 | 261 | | À | 1 ' | 2007 | 1114 | | E | P 20 | 06-7 | 0861 | 1 | 2006 | 0302 | | |
| | | R: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR. | GB, | GR, | HU, | IE, |
| | | | IS. | IT. | LI, | LT, | LU, | LV. | MC. | NL. | PL, | PT. | RO. | SE. | SI, | SK. | TR | |
| PRIOR | RITY | APP | | | | | | | | | | | | | 7052 | | | |
| | | | | | | | | | | D | E 20 | 05-1 | 0200 | 5029 | 3722 | 0050 | 624 | |
| | | | | | | | | | | | | | | | 2006 | | | |
| | | | | | | | | | | *** | - 20 | •• п | | | 2000 | 0002 | | |

G1

AB Title compds. I [Z = [C]n; n = 0-2; Y = 0, S, NR10, etc.; T, U, V, W, X = C, N; R1, R2 = H, halo, CN, etc.; R3 = monocyclic or bicyclic heteroaryl ring with provisos; R4, R5, R6, R7, R8 = H, halo, CN, etc.; R10 = H, alkyl, alkylcarbonyl, etc.] and their pharmaceutically acceptable salts were prepared For example, claimed naphthylpyridine II was prepared from

6-bromo-2-methoxynaphthalenein 2-steps. In human CYP11B2 inhibition assavs, 46-examples of compds. I at 500 nM exhibited 16-97% inhibition.

MSTR 1

G1-G21

G1 = 226



G2 = N / CH = (0-1) CH2 G9

= isoquinolinyl G34 = o-C6H4

Patent location:

claim 1 Note:

also incorporates claim 14 Note: substitution is restricted

Note: or pharmaceutically acceptable salts and isomers

additional substitution also claimed Note:

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 11 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 145:293082 MARPAT

TITLE: Preparation of pyrazolyl substituted xanthines as

antagonists of A2B receptors

INVENTOR(S): Wang, Guoquan; Rieger, Jayson M.; Thompson, Robert D. PATENT ASSIGNEE(S):

Adenosine Therapeutics, LLC, USA SOURCE:

PCT Int. Appl., 70pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent.

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA | TENT | NO. | | KI | ND | DATE | | | A | PPLI | CATI | ON N | ο. | DATE | | | |
|----|--|---------------------------------|--------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|--------------------------|--------------------------|--------------------------|
| | O 2006091897 A2 O 2006091897 A3 W: AE, AG, AL, AM, | | | | | 2006 | | | W | 0 20 | 06-U | S674 | 6 | 2006 | 0227 | | |
| | W: | CN,
GE,
KZ,
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NI, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BÑ, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 20070249598 A1 20071025 US 2006-362392 20060227

PRIORITY APPLN. INFO: US 2005-656086P 20050225
OTHER SOURCE(S): CASREACT 145:293082

0

AB Title compds. represented by the formula I [wherein R = H, (halo)alkyl, cycloalkyl, etc.; Rl, R2 = independently H, (cyclo)alkyl, alkenyl, etc.; Ll = (un)substituted C, N, O, S or P, with proviso; Z = (un)substituted heteroaryl; Zl = (un)substituted (hetero)aryl; In = 0-2; and pharmaceutically acceptable salts thereof] were prepared as A2B adenosine receptor (ARs) antagonists (no data). For example, cyclization of 6-chloronicotinoyl chloride with 5,6-diamino-1,3-dipropyluracil, and followed by reaction with hydrazine in EtOH, gave 1,3-dipropyl-8-(6-hydrazino-3-pyridyl)xanthine. I were tested for affinity with A2B receptors in HEK-293 cells. Thus, I and their pharmaceutical compns. are useful as A2B adenosine receptors antagonists for the treatment of A2B receptors mediated diseases, such as asthma, allergy immune disease, and etc.

MSTR 1B



Patent location: claim 1

Note: also incorporates claim 80

Note: or pharmaceutically acceptable salts

Note: substitution is restricted

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 12 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 143:306329 MARPAT

TITLE: Preparation of

2-pvridinvl[7-(substituted-pvridin-4-vl)pvrazolo[1,5-

a]pyrimidin-3-yl]methanones as GABA receptor

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

modulators for treating neurological and psychiatric diseases

INVENTOR(S): Skolnick, Phil

PATENT ASSIGNEE(S): Dov Pharmaceutical, Inc., USA

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

REFERENCE COUNT:

| PATENT NO. | | | | KI | ND | DATE | | | Al | PPLI | CATI | ON N | ο. | DATE | | | |
|------------|------|------|-----|-----|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|
| WO | 2005 | 0844 | 39 | A | 1 | 2005 | 0915 | | W | 20° | 05-U | S723 | 8 | 2005 | 0302 | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FΙ, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SM, |
| | | SY, | ΤJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | UZ, | VC, | VN, | YU, | ZA, | ZM, | zw |
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| | | | | | | | | | | | | | | CY, | | | |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, | IS, | IT, | LT, | LU, | MC, | NL, | PL, | PT, |
| | | | | | | | BF, | ΒJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, |
| | | | ΝE, | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | 2005 | | | |
| | 2005 | | | | | | | | | | | | | 2005 | | | |
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| EΡ | | | | | | | | | | | | | | 2005 | | | |
| | R: | | | | | | | | | | | | | GB, | | HU, | IE, |
| | | | | | | | | | | | | | | SK, | | | |
| | | | | | | | | | | | | | | 2005 | | | |
| | 2007 | | | | | | | | | | | | | 2005 | | | |
| | | | | | | | | | | | | | | 2005 | | | |
| MX | 2006 | 0099 | 74 | A | | 2006 | 1208 | | M: | X 20 | 06-9 | 974 | | 2006 | 0904 | | |

| IN | 2006DN05 | 5103 | A | 20070622 | IN | 2006-DN5103 | 20060904 |
|----------|----------|--------|---|----------|----|--------------|----------|
| ИО | 20060044 | 440 | A | 20061030 | NO | 2006-4440 | 20060929 |
| KR | 20061350 | 017 | A | 20061228 | KR | 2006-720714 | 20061002 |
| PRIORITY | APPLN. | INFO.: | | | US | 2004-549418P | 20040302 |
| | | | | | US | 2005-70394 | 20050301 |
| | | | | | WO | 2005-US7238 | 20050302 |

OTHER SOURCE(S):

CASREACT 143:306329

Ι

ΙI

$$N$$
 N
 $(R)_n$

AB Title compds. I [n = 1-4; each R = independently halo, OH, alkyl, alkoxy, NO2, NH2, alkanovl, alkvl, etc. | were prepared as y-aminobutyric acid (GABA) receptor modulators useful in the treatment of neurol. and psychiatric diseases. Thus, reacting 3-dimethylamino-1-(2-fluoro-4-pyridyl)-2-propen-1-one (preparation given) with (3-amino-1H-pyrazol-4-yl) (pyridin-2-yl) methanone gave pyrazolopyrimidine II in 86% yield. In a radioligand assay, selected I exhibited good affinity for the GABAA receptor, as demonstrated by their ability to inhibit [3H]Ro 15-1788 binding to the receptor with an IC50 < 10 uM. I and their compns, are useful for preventing and treating stroke, head trauma, epilepsy, pain, migraine, mood disorders, anxiety, post traumatic stress disorder, obsessive compulsive disorders, mania, bipolar disorders, schizophrenia, seizures, convulsions, tinnitus, neurodegenerative disorders including Alzheimer's disease, amyotrophic lateral sclerosis and Parkinson's disease, Huntington's chorea, depression, bipolar disorders, mania, trigeminal and other neuralgia, neuropathic pain, hypertension, cerebral ischemia, cardiac arrhythmia, myotonia, substance abuse, myoclonus, essential tremor, dyskinesia and other movement disorders, neonatal cerebral hemorrhage, and spasticity, and other psychiatric and neurol, disorders mediated by GABA and/or GABA receptors.

MSTR 1

G1 = 213

G19 = 485

G20 = CH=CHCH=CH G24 = 68-14 69-24 70-25

Patent location: claim 1

Note: also incorporates broader disclosure
Note: additional substitution also claimed

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 13 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 143:306200 MARPAT

TITLE: Preparation of hydroxy-6-heteroarylphenanthridines as

PDE4 inhibitors

INVENTOR(S): Schmidt, Beate; Flockerzi, Dieter; Hatzelmann, Armin; Zitt, Christof; Barsig, Johannes; Marx, Degenhard;

Kley, Hans-Peter; Kautz, Ulrich

PATENT ASSIGNEE(S): Altana Pharma AG, Germany; Kautz, Ulrich SOURCE: PCT Int. Appl., 176 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

```
WO 2005085225 A1 20050915 WO 2005-EP50931 20050302
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
    AU 2005219576
                      A1 20050915
                                           AU 2005-219576 20050302
     CA 2557752
                           20050915
                                           CA 2005-2557752 20050302
                       A1
     EP 1723135
                           20061122
                                           EP 2005-716889 20050302
                      A1
         R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,
             HR, LV, MK, YU
                                            CN 2005-80005768 20050302
     CN 1922170
                 A
                            20070228
    US 2005008321 A 20070724
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US 20080167301 A1 20080710
IN 2006WN01086 A 20070413
                                            BR 2005-8321
                                                             20050302
                                            JP 2007-501289
                                                              20050302
                                            ZA 2006-6176
                                                              20060726
                                            MX 2006-9695
                                                              20060825
                                            US 2006-590803
                                                              20060825
                                            TN 2006-MN1086
                                                              20060911
    NO 2006004221 A 20060919
KR 2006135837 A 20061229
                                            NO 2006-4221
                                                              20060919
                      A 20061229
                                            KR 2006-719892 20060926
                                                             20040303
PRIORITY APPLN. INFO.:
                                            EP 2004-4973
                                                              20041207
                                            EP 2004-106359
                                            WO 2005-EP50931 20050302
OTHER SOURCE(S): CASREACT 143:306200
GI
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1, R2 = independently OH and F-substituted/cyclo/alkoxy, 2.2-difluoroethoxy, etc.; R1-R2 = alkylenedioxy; R3, R31 = independently H, alkyl; R4 = H, alkyl, OR41; R5 = OR51; R41, R51 = independently H, alkoxy/hydroxy/F-substituted/alkyl, alkylcarbonyl; Har = (un)substituted 5-10 membered monocyclyl or fused bicyclyl unsatd. or partially saturated heteroaryl comprising 1-4 heteroatoms selected from O, N, S; their salts, N-oxides, and salts of N-oxides) were prepared as effective PDE4 inhibitors for treating respiratory diseases. Thus, coupling of 2,6-dimethoxynicotinic acid with amine (1RS,3RS,4RS)-II (general preparation given, no data for its intermediates), cyclization, and saponification gave phenanthridine (1RS,3RS,4RS)-III. Selected I inhibited PDE4 with -log ICSO values in the range of 6.91 to 9.4 mol/1.

MSTR 1

G6 = quinolinyl

Patent location:

Note: substitution is restricted

Note: additional oxo substitution also claimed
Note: and salts, N-oxides, and salts of N-oxides
Note: additional substitution also claimed

claim 1

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 14 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 143:193918 MARPAT

TITLE: Preparation of quinoline compounds as agricultural

fungicides

INVENTOR(S): Ito, Hiroyuki; Fujiwara, Kota; Morimoto, Munetsugu; Tanaka, Harukazu; Tamagawa, Yasushi; Komai, Hiroyuki

PATENT ASSIGNEE(S): Sankyo Agro Company, Limited, Japan

A1 20081106

SOURCE: PCT Int. Appl., 173 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

US 20080275242

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2005070917 A1 20050804 WO 2005-JP1171 20050121 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2005206437 A1 20050804 AU 2005-206437 20050121 CA 2005-2554187 20050121 EP 2005-704224 20050121 CA 2554187 A1 20050804 20061227 EP 1736471 A1 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR CN 1910172 A 20070207 CN 2005-80002960 20050121

US 2006-587100 20060721

RR 2006127154 A 20061211 KR 2006-716976 20060823 PRIORITY APPLN. INFO.: JP 2004-15360 20040123 WO 2005-JP1171 20050121

GT

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I, II, IV [R1, R2 = optionally substituted alkyl with halo, etc.; R3, R4 = H, halo, etc.; R5 = H, acyl, etc.; X = halo, etc.; Y = halo, etc.; n = 0-4; m = 0-6] were prepared For example, cyclization of quinoline-3-carbonitrile with a mixture of 1-fluoro-(2-methylpropen-1-yl)benzene and 1-fluoro-(2-methylpropen-2-yl)benzene in the presence of methanesulfonic acid afforded 3-(5-fluoro-3, 3-dimethyl-3, 4-dihydroisoquinolin-1-yl)quinoline (V) in 47% yield. Compds. V exhibited the fungicidal activity of 100% against poricularia orvzae. Formulations are given.

MSTR 1

G11 = 30

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G12
30
G12
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Patent location: claim 1 Note: or salts

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 15 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:316701 MARPAT

TITLE: Preparation of pyridinyl benzenesulfonylamide derivatives as chemokine receptor antagonist

INVENTOR(S): Habashita, Hiromu; Ochiai, Hiroshi; Tokuda, Natsuko; Shibayama, Shiro; Watanabe, Noriki; Komiya, Takaki;

Takeda, Kazuhiko
PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 183 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | | | | | PLICATI | | DATE | |
|-----------------|------------------------|---------|--------|-----|---------|---------|----------|---------|
| WO 2005023 | | | | | | | 20040903 | |
| | , AG, AL, | | | | | | | |
| | GH, GM, | | | | | | | |
| | , LR, LS, | | | | | | | |
| | , NZ, OM,
TM, TN, | | | | | | | |
| | , GH, GM, | | | | | | | |
| | , BY, KG, | | | | | | | |
| | , ES, FI,
, SK, TR, | | | | | | | |
| SI | , TD, TG | | | | | | | , |
| EP 1661889 | · A | 1 2006 | 0531 | EP | 2004-7 | 72925 | 20040903 | |
| R: A7 | , BE, CH, | DE, DK, | ES, FR | GB, | GR, IT, | LI, LU, | NL, SE, | MC, PT, |
| | , SI, FI, | | TR, BG | CZ, | EE, HU, | PL, SK | | |
| US 2007025 | 4886 A | 1 2007 | 1101 | US | 2004-5 | 70813 | 20040903 | |
| PRIORITY APPLN. | INFO.: | | | JP | 2003-3 | 14248 | 20030905 | |
| | | | | JP | 2004-1 | 49683 | 20040519 | |
| | | | | WO | 2004-J | P13186 | 20040903 | |

GI

AB Title compds. represented by the formula I [wherein ring A, B, D = independently (un)substituted cyclic group; J = OCH2, NRCH2, NRCO, C.tplbond.C; G = NHSO2; and their salts, N-oxides, solvates, or prodrugs thereof] were prepared as chemokine receptor (CCR) antagonist. For example, reaction of 3-chloro-2-methylbenzenesulfonylchloride with [4-chloro-3-[(1-methylpiperidin-4-yl)methoxy]phenyl]methanol gave II. II showed inhibition of human CCR4 with an IC50 value of 0.23 µM in the presence of 0.3% BSA. Thus, I and their pharmaceutical compns. are useful as chemokine receptor (especially CCR4 and/or CCR5) antagonists for the prevention and/or treatment of diseases associated with chemokine receptor, such as inflammatory, allergic diseases, organ transplant rejection reaction, and neoplasms.

II

MSTR 1

G1 = 117-2 118-3

G2 = 396

G3 = bond G6 = bond Patent location: claim 1 Note: or salts or n-oxides, solvates or prodrugs not both G3 and G6 contain more than 4 atoms Note:

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 16 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:261402 MARPAT

TITLE: Preparation of phenanthridine derivatives as

anti-viral agents INVENTOR(S):

Tor, Yitzhak; Luedtke, Nathan

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 58 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATEN | T | 40. | | KI | ND | DATE | | | Al | PPLI | CATI | ON N | 0. | DATE | | | |
|-------|-----|------|-----|-----|-----|------|------|-----|-----|------|------|------|-----|------|------|-----|-----|
| | | | | | | | | | - | | | | | | | | |
| WO 20 | 050 | 0163 | 43 | A | 1 | 2005 | 0224 | | W | 20 | 04-U | S261 | 88 | 2004 | 0811 | | |
| W | : | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, |
| | | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, | NI, |
| | | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | SY, |
| | | TJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | |
| P | W: | BW, | GH, | GM, | KE, | LS, | MW, | MZ, | NA, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, |
| | | AZ, | BY, | KG, | KZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, |
| | | EE, | ES, | FI, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | NL, | PL, | PT, | RO, | SE, |
| | | SI, | SK, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, |
| | | SN. | TD, | TG | | | | | | | | | | | | | |

PRIORITY APPLN. INFO .: US 2003-495445P 20030811

OTHER SOURCE(S): CASREACT 142:261402 GI

A series of substituted phenanthridine derivs. (e.g. ethidium derivs. I AB and II) (R, R' = each functionalized or unfuctionalized alkyl, alkenyl, alkynyl, aryl, aralkyl, heteroaryl, or alkheteroaryl; wherein alkheteroaryl refers to a straight-chain alkyl, alkenyl or alkynyl group where one of the hydrogen atoms bonded to a terminal carbon atom is replaced with a heteroaryl moiety; Ar = optionally substituted Ph or any aromatic residue; R1, R2 = independently selected from the group consisting of a urea, a substituted urea, a di-Boc-guanidine, conjugated amino acids, carbohydrates, NH2, 1-pyrrolyl, guanidino, and benzyloxycarbonylamino) has been synthesized by converting the amines at the 3- and 8- positions of

ethidium bromide into guanidine, pyrrole, urea, and various substituted ureas. The resulting derivs. exhibit unique spectral properties that change upon binding nucleic acids. These compds. maximize the binding affinity of phenanthridine to viral RNA and DNA sites, while minimizing the binding to host cell DNA. The antiviral activity of the compds. can thus be maximized, while toxic and/or mutagenic side effects are minimized. The compds, have an enhanced affinity and specificity for HIV-1 rev response element as compared to ethidium bromide. Thus, ethidium bromide was acvlated by Ph chloroformate in a mixture of 500 mM sodium phosphate buffer (pH 6.6) and acetone at room temperature for 10 min to give 3,8-bis(phenoxycarbonylamino)-6-phenyl-5-ethylphenanthridinium dihydrogenphosphate which was heated with NH3 in methanol in a pressure tube at 80° for 1 h to give 3,8-di(ureido)-6-phenyl-5-ethylphenanthridinium chloride (III). III in vitro showed the binding affinity to DNA with Kd of 106, µM, IC50 of >1/0 µM µg/mL against HIV-1 rev response element, IC50 of 15 µM against HIV-1, and exhibited no toxicity against HeLa cells at 10 µM.

MSTR 1B

G1 = 19

18

G6 = quinolinyl Patent location:

Note:

claim 2

substitution is restricted

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 17 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:219282 MARPAT

TITLE: Pyrazoloisoquinoline derivatives as kinase inhibitors, and their preparation, pharmaceutical compositions,

and use in the treatment of diseases involving increased NIK activity.

INVENTOR(S): Majid, Tahir N.; Hopkins, Corey; Pedgrift, Brian L.;

Collar, Nicola; Wirtz-Brugger, Friederike; Merrill,

PATENT ASSIGNEE(S): Aventis Pharmaceuticals Inc., USA

SOURCE: PCT Int. Appl., 94 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| | TENT : | | | | | | | | | | | | | DATE | | | |
|----------|--------|-------|------|-----|-----|-------|-------|------|------|------|--------|-------|-----|------|------|-----|-----|
| | 2005 | | | | | | | | | | | | | 2003 | 0703 | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NI, | NO, | NZ, | OM, |
| | | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | TJ, | TM, | TN, | TR, | TT, |
| | | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | KG, | KΖ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | FI, | FR, | GB, | GR, | HU, | IE, | IT, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | BF, | ΒJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| | 2531 | | | | | | | | | | | | | | | | |
| | 2003 | | | | | | | | | | | | | | | | |
| | 1644 | | | | | | | | E | P 20 | 03 - 7 | 4243 | 3 | 2003 | 0703 | | |
| EP | 1644 | 371 | | В | 1 | 2008 | 0213 | | | | | | | | | | |
| | R: | | | | | | | | | | | | LU, | NL, | SE, | MC, | PT, |
| | | | | | | CY, | | | | | | | | | | | |
| | 1802 | | | | | | | | | | | | | | | | |
| | 2003 | | | | | | | | | | | | | | | | |
| JP | 2007 | 5212: | 27 | T | | 2007 | 0802 | | J. | P 20 | 05-5 | 0744 | 9 | 2003 | 0703 | | |
| AT | 3860 | 34 | | T | | | | | | | | | | 2003 | | | |
| | 2005 | | | | | 2006 | | | | | | | | 2005 | | | |
| | 2005 | | | | | | | | | | | | | | | | |
| | 2006 | | | | | | | | | | | | | | | | |
| | 2006 | | | | | 2007 | 0601 | | | N 20 | 06-C | N34 | | 2006 | 0103 | | |
| PRIORIT: | Y APP | LN. | INFO | . : | | | | | | | | | | 2003 | | | |
| | | | | | | | | | | 0 20 | 03-U | \$211 | 44 | 2003 | 0703 | | |
| OTHER SO | DURCE | (S): | | | CAS | REAC' | Г 14: | 2:21 | 9282 | | | | | | | | |

AB Novel pyrazoloisoquinoline derivs. I, useful as kinase inhibitors, are disclosed (wherein: A = (un)substituted alkyl, OH or derivs., SH or derivs., COZH or derivs., NH2 or derivs., cyano, (un)substituted heteroaryl, cycloalkyl, or heterocyclyl; B = bond, (un)substituted CH:CH, C.tplbond.C, O(CH2)1-4, O, S, CO, (un)substituted NH, NHCO, CONH, NHSO2, SOZNH, NHCONH, or C1-4 alkylene; D = (un)substituted alkyl, heteroaryl,

heterocyclyl, aryl, or cycloalkyl; or BD = H, halo, fluoroalkoxy, (un) substituted alkyl; R = H, alkyl, (un) substituted arylalkyl; X, Z = H, alkyl, OH, alkoxy, halo, fluoroalkyl, CO2H or derivs., NH2 or derivs., cyano, SH or derivs., (un) substituted heterocyclyl or cycloalkyl; with provisos]. I are suitable for producing pharmaceuticals for the prophylaxis and therapy of diseases whose course involves an increased activity of NIK. Approx. 75 examples were prepared, and these plus addnl. compds. are individually claimed. For instance, 3-methoxybenzoic acid was condensed with 3-methyl-5-phenyl-1H-pyrazol-4-ylamine using HOBT and DIPC, and the resultant benzamide derivative was cyclized by treatment with P205 and POC13 in xylene at 160°, to give title compound II. In a test for inhibition of release of IL1B, TNFa, and IL6 in LPS-stimulated heparinized whole human blood, II had IC50 values of 1.3, 1.2, and 7 uM, resp.

MSTR 1

G12 = 55

_G14_G13

G13 = quinolinyl

G14 = bond Patent location:

Note:

or pharmaceutically acceptable salts Note: substitution is restricted also incorporates broader disclosure Note:

Stereochemistry: or stereoisomeric forms

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 18 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 142:134600 MARPAT

TITLE: Preparation of pyrazoloisoguinolines as NFkB-inducing kinase (NIK) inhibitors

Majid, Tahir Nadeem; Hopkins, Corey; Pedgrift, Brian INVENTOR(S):

Leslie; Collar, Nicola; Wirtz-Brugger, Friederike;

Merrill, Jean

PATENT ASSIGNEE (S): Aventis Pharmaceuticals Inc., USA SOURCE: U.S. Pat. Appl. Publ., 41 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

10/587100

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-----------------------|------|----------|-----------------|----------|
| | | | | |
| US 20050009859 | A1 | 20050113 | US 2003-613588 | 20030703 |
| US 7132428 | B2 | 20061107 | | |
| PRIORITY APPLN. INFO. | : | | US 2003-613588 | 20030703 |
| CT | | | | |

RN A Z N BD I

- AB Title compds. [I; A = (substituted) alkyl, heteroaryl, heterocyclyl; B = bond, C:CRl, C.tplbond.C, O(CH2)a, O, S, CO, NR2, NR2CO, (substituted) alkylene, etc.; R1 = H, alkyl, aryl, etc.; R2 = alkyl, OH, alkoxy, halo, etc.; a = 1-4; D = (substituted) alkyl, heteroaryl, heterocyclyl, aryl, cycloalkyl; BD = H, halo, fluoroalkyl, fluoroalkoxy, etc.; R = H, alkyl, (substituted) aralkyl; X, Z = H, alkyl, OH, alkoxy, halo, fluoroalkyl, CO2Rl, N(R1)2, cyano, SRI, SORI, SOSRI, (substituted) heterocyclyl, cycloalkyl, etc.; with provisos], were prepared Thus, hydroxybenzotriazole, diisopropyl carbodiimide, benzoic acid, and
 - 3,5-diphenyl-1H-pyrazol-4-ylamine were stirred 12 h in MeCN to give a residue which was heated with P2O5 and POC13 in xylene at 150° for 4 h followed by stirring at room temperature for 12 h to give 3,5-diphenyl-1H-pyrazolo[4,3-c]isoquinoline. The latter inhibited TNFa release in LPS-stimulated human peripheral blood lymphocytes with ICSO = 1.9 nM.

MSTR 1

G12 = 55

5514-G13

G13 = 246

= bond

REFERENCE COUNT:

Patent location:

claim 1 Note: or pharmaceutically acceptable salts

Note: substitution is restricted

Stereochemistry: or stereoisomeric forms

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 19 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 139:401354 MARPAT

TITLE: Light emitting device and display apparatus using same INVENTOR(S): Tsubovama, Akira; Okada, Shinjiro; Takiguchi, Takao;

Ueno, Kazunori; Igawa, Satoshi; Kamatani, Jun;

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

Furugori, Manabu; Iwawaki, Hironobu PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 53 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PA | ATENT : | | KI | ND | DATE | | | Al | PPLI | CATI | и ис | ο. | DATE | | | | |
|---------|-----------------------------|------|------|-----|------|------|------|-----|------|------|------|------|------|------|------|-----|-----|
| | | | | | | | | | - | | | | | | | | |
| WO | 2003 | 0955 | 87 | A. | 1 | 2003 | 1120 | | W | 20 | 03-J | P560 | 1 | 2003 | 0502 | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, | LS, |
| | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NI, | NO, | NZ, | OM, | PH, |
| | | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, | SL, | ΤJ, | TM, | TN, | TR, | TT, | TZ, |
| | UA, UG, US, UZ, VC, VN, YU, | | | | | | | ZA, | ZM, | ZW | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AM, | ΑZ, | BY, |
| | | KG, | ΚZ, | MD, | RU, | TJ, | TM, | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, |
| | | FI, | FR, | GB, | GR, | HU, | ΙE, | IT, | LU, | MC, | NL, | PT, | RO, | SE, | SI, | SK, | TR, |
| | | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG |
| JE | 2003 | 3320 | 74 | A | | 2003 | 1121 | | J. | P 20 | 02-1 | 3409 | 8 | 2002 | 0509 | | |
| AU | AU 2003231579 A1 20031111 | | | | | | | | A) | J 20 | 03-2 | 3157 | 9 | 2003 | 0502 | | |
| US | US 20050221115 A1 20051006 | | | | | | | | U | 5 20 | 04-5 | 0731 | 6 | 2004 | 0910 | | |
| US | 7361 | 414 | | B: | 2 | 2008 | 0422 | | | | | | | | | | |
| PRIORIT | TY APP | LN. | INFO | . : | | | | | J | P 20 | 02-1 | 3409 | 8 | 2002 | 0509 | | |
| | | | | | | | | | | 20 | 03-J | P560 | 1 | 2003 | 0502 | | |

A light emitting device is described comprising a pair of electrodes provided on a substrate, and an organic substance layer provided between the electrode and comprising a copper coordination compound having a partial structure represented by the general formula (1): Cu-N(A), wherein heterocyclic ring A including nitrogen atom N represents a pyridine or quinoline ring, or a heterocyclic ring having one or more C-H of a pyridine or quinoline ring replaced with nitrogen atom(s), and the

heterocyclic rings may have a substituent selected from the group consisting of an aromatic ring group that may have a substituent, a halogen atom, or a linear or branched alkyl group having 1-10 C atoms in which only a single methylene group or two or more non-adjacent methylene groups of the alkyl group may be substituted with -0-, -S-, -CO-, -CO-0-, -C-CO-, -CH-CH-, or -CC-, and a hydrogen atom of the alkyl group may be substituted with a fluorine atom or an aromatic ring group. A display apparatus

comprising the light emitting device is also described.

MSTR 1

G1 G10

G1 = 70

97

G6 = isoquinolinyl (opt. substd.) G7 = quinolinyl (opt. substd.)

Patent location: claim 1
Note: as complexes with G10

Note: as complexes with GIU

Note: additional ligands also claimed

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 20 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 136:369742 MARPAT

TITLE: Preparation of annelated pyrido[1,2-a]pyrazinediones

as cGMP-specific phosphodiesterase inhibitors

INVENTOR(S): Orme, Mark W.; Sawyer, Jason Scott; Schultze, Lisa M.

PATENT ASSIGNEE(S): Lilly Icos LLC, USA SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA: | ENT I | NO. | | KI | ND | DATE | | | Al | PPLI | CATI | N NC | ο. | DATE | | | |
|--------------------------------------|-------|-----|-----|-----|-----|------|-----|-----|-----|------|------|------|-----|------|------|-----|-----|
| | | | | | | | | | _ | | | | | | | | |
| WO 2002038563 A2
WO 2002038563 A3 | | | | | | 2002 | | | W | 20 | 01-U | S313 | 86 | 2001 | 1009 | | |
| | | | | | | | | A7. | BA. | BB. | BG. | BR. | BY. | BZ, | CA. | CH. | CN. |
| | | | | | | | | | | | | | | GB, | | | |
| | | | | | | | | | | | | | | KZ, | | | |
| | | | | | | | | | | | | | | NO, | | | |
| | | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | TJ, | TM, | TR, | TT, | TZ, | UA, | UG, |
| | | US, | UZ, | VN, | YU, | ZA, | ZW | | | | | | | | | | |
| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, | CY, |
| | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, |

| | | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG | |
|----------|-------|------|------|-----|-----|------|------|-----|-----|------|------|-------|-----|------|------|-----|-----|
| CA | 2427 | 608 | | A | 1 | 2002 | 0516 | | C | A 20 | 01-2 | 4276 | 08 | 2001 | 1009 | | |
| AU | 2001 | 0966 | 99 | A | | 2002 | 0521 | | Al | J 20 | 01-9 | 6699 | | 2001 | 1009 | | |
| EP | 1366 | 050 | | A | 2 | 2003 | 1203 | | E | 20 | 01-9 | 7759 | 2 | 2001 | 1009 | | |
| EP | 1366 | 050 | | В | 1 | 2005 | 0413 | | | | | | | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | IE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL, | TR | | | | | | |
| JP | 2004 | 5131 | 69 | T | | | | | JI | 20 | 02-5 | 4109 | 6 | 2001 | 1009 | | |
| JP | 4101 | 054 | | В | 2 | 2008 | 0611 | | | | | | | | | | |
| AT | 2931 | 11 | | T | | 2005 | 0415 | | A: | 20 | 01-9 | 7759 | 2 | 2001 | 1009 | | |
| ES | 2241 | 879 | | T | 3 | 2005 | 1101 | | E | 3 20 | 01-9 | 7759 | 2 | 2001 | 1009 | | |
| US | 2004 | | | | | 2004 | 0226 | | U | 3 20 | 03-3 | 9881 | 9 | 2003 | 0409 | | |
| | 6960 | | | | | | 1101 | | | | | | | | | | |
| MX | 2003 | 0040 | 23 | A | | 2004 | 0212 | | M | (20 | 03-4 | 023 | | 2003 | 0507 | | |
| PRIORITY | Y APP | LN. | INFO | . : | | | | | U: | 3 20 | 00-2 | 4680 | 5P | 2000 | 1108 | | |
| | | | | | | | | | W | 20 | 01-U | \$313 | 86 | 2001 | 1009 | | |
| CT | | | | | | | | | | | | | | | | | |

AB Title compds. [e.g., I; Rl = e.g., Me; R2 = e.g., piperonyl;R3 = H or alkyl; R4R5 = atoms to complete a imidazole, thiazole, benzene, or pyridine ring, etc.] were prepared Thus, D-histamine Me ester (preparation given) was cyclocondensed with piperonal and the N-chloroacetylated product cyclocondensed with MeNH2 to give I (Rl = Me, R2 = piperonyl, R3 = H, R4R5 = N:CHN). Data for biol. activity of 2 prepared I were given.

MSTR 1

G1 = o-C6H4 G4 = quinolinyl Patent location:

Note: Note: claim 1 additional ring formation also claimed and pharmaceutically acceptable salts $\,$

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 21 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 136:118400 MARPAT

TITLE: Novel 6-heteroarylphenanthridines

INVENTOR(S): Bundschuh, Daniela; Flockerzi, Dieter; Grundler, Gerhard; Hatzelmann, Armin; Kley, Hans-Peter;

Weinbrenner, Steffen; Gutterer, Beate

PATENT ASSIGNEE(S): Byk Gulden Lomberg Chemische Fabrik G.m.b.H., Germany

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| WO 2002006270 A1 20020124 WO 2001-EP7818 20010707 W: AE, AL, AU, BA, BG, BR, CA, CN, CO, CZ, EC, EE, GE, HR, HU, ID, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, UA, US, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR |
|--|
| IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, UA, US, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, IJ, IM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, |
| US, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, |
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| CA 2415935 A1 20020124 CA 2001-2415935 20010707 |
| EP 1303506 A1 20030423 EP 2001-962844 20010707 |
| EP 1303506 B1 20050202 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, |
| IE, SI, LT, LV, FI, RO, MK, CY, AL, TR |
| JP 2004504316 T 20040212 JP 2002-512173 20010707 |
| AT 288430 T 20050215 AT 2001-962844 20010707 |
| AT 288430 T 20050215 AT 2001-962844 20010707
ES 2236288 T3 20050716 ES 2001-962844 20010707 |
| AU 2001283935 B2 20060713 AU 2001-283935 20010707 |
| US 20040038979 A1 20040226 US 2002-297765 20021209 |
| US 6884802 B2 20050426 |
| PRIORITY APPLN. INFO.: EP 2000-115352 20000714 |
| WO 2001-EP7818 20010707 |
| GI |

AB Compds. I, [which R and R = independently OH, (cyclo)alkoxy,

Ι

cycloalkylmethoxy, or F-substituted alkoxy; or R and R taken together = 1,2-alkylenedioxy; R, R, and R = independently H or alkyl; or R and R taken together = alkylene; R and R = H or together form a double bond; Het = an (un) substituted pyrrolyl, furanyl, thienyl, pyrazolyl, imidazolyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrimidinyl, pyrazinyl or pyridazinyl radical, or an (un)substituted fused bi-or tricyclic ring system comprising at least one aromatic ring and up to 4 heteroatoms-selected from the group consisting of O. S or N. which is bonded to the phenanthridinyl radical via one of the rings comprising one or more heteroatoms] were prepared as reactive PDE4 inhibitors and treating airway diseases. For example, (-)-cis-8,9-dimethoxy-6-quinolin-4-yl-1,2,3,4,4a,10b-hexahydrophenanthridine was prepared by cyclocondensation of (-)-cis-N-[2-(3,4-dimethoxyphenyl)cyclohexyl]quinoline-4-carboxamide (preparation given). In an assay against phosphodiesterase IV (PDE4), I showed inhibitory activity with -log IC50 value of 7.4.

MSTR 1

Patent location:

Note: and salts and N-oxides Note: substitution is restricted

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 22 OF 29 MARPAT COPYRIGHT 2009 ACS on STN ACCESSION NUMBER:

136:69825 MARPAT

TITLE: Preparation of heterocycles containing a

pyrido[1,2-a]pyrazinedione subunit for therapeutic use

as phosphodiesterase V inhibitors INVENTOR(S): Orme, Mark W.; Sawver, Jason Scott; Schultze, Lisa M.

Lilly Icos LLC, USA PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patient. LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| P | PATENT NO. | | | | | | DATE | | | | | | M MC | | DATE | | | |
|------------------|---------------------|--|--|--------------------------|--------------------------|--------------------------|---|---|--------------------------|---|---|--|--|----------------------------|---------------------------------|--|-------------------|-------------------|
| | Ю | 2002 | 0006 | 57 | A: | 2 | 2002 | 0103 | | | | | | | 2001 | 0515 | | |
| , | | | AE,
CO,
GM,
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GN, | IE,
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TG | TR, | |
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2003 | 1211
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0626 | MC, | PT, |
| O.T. | | | | | | | | | | | | | | | | | | |

GI

AB Heterocycles containing a 9,9a-dihydro-2H-pyrido(1,2-a]pyrazine-1,4(3H,6H)-dione subunit, such as I [R1 = H, alkyl, alkenyl, alkynyl, haloalkyl, cycloalkyl, aryl, heteroarylalkyl; R2 = Ph, thienyl, furanyl, pyridinyl, etc.; R4R5 = fused heterocyclic or carbocyclic ringl, were prepared for pharmaceutical use as phosphodiesterase V inhibitors for treatment of conditions, such as erectile dysfunction and female arousal disorder. Thus, dione II was prepared via cyclocondensation of

ΙI

(±)-a-amino-1H-pyrrolo[2,3-b]pyridine-3-propanoic acid Me ester with piperonal followed by N-acylation of the cyclocondensation product with C1CH2COC1 and subsequent cyclocondensation of the N-acylated product with MeNH2. The prepared pyrido[1,2-a]pyrazinediones were tested for their ability to inhibit phosphodiesterase V.

MSTR 1A

G5 = quinolinvl = 22-3 23-1

Patent location: claim 1

Note: and pharmaceutically acceptable salts and solvates

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 23 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 134:193217 MARPAT

TITLE: Process for preparing biarvl compounds

INVENTOR(S): Miller, Joseph A.; Farrell, Robert P.

PATENT ASSIGNEE(S): Catalytica, Inc., USA

U.S., 14 pp. SOURCE: CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--------------------|-------|----------|-----------------|----------|
| | | | | |
| US 6194599 | B1 | 20010227 | US 1997-825792 | 19970408 |
| US 5922898 | A | 19990713 | US 1997-966335 | 19971107 |
| PRIORITY APPLN. IN | WFO.: | | US 1997-825792 | 19970408 |
| | | | | |

OTHER SOURCE(S): CASREACT 134:193217

AB The title process comprises reacting an arylzinc reagent with an aryl chloride in the presence of a Ni or a Pd catalyst. Thus, PhLi was treated with ZnCl and the product condensed with 4-ClC6H4CN in the presence of a

prepared Ni catalyst to give 81% 4-PhC6H4CN.

MSTR 1

G1-G1

G1 = quinolinyl / isoquinolinyl

Patent location: claim 1

Note: also incorporates broader disclosure

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 24 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 133:222971 MARPAT

TITLE: Preparation of 6-O-substituted macrolides erythromycin

analogs having antibacterial activity

INVENTOR(S): Or, Yat Sun; Clark, Richard F.; Ma, Zhenkun; Rupp, Michael J.

PATENT ASSIGNEE(S): Abbott Laboratories, USA

SOURCE: PCT Int. Appl., 142 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | | | | KI | ND | DATE | | | Al | PPLI | CATI | и ис | ٠. | DATE | | | |
|------------|------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|
| WO | | AE,
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ZA, | BY,
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SE, | CH,
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LV,
SI, | CU,
IL,
MD,
SK, | IN,
MG,
SL, |
| | | DK,
CG, | ES,
CI, | FI,
CM, | FR, | GB,
GN, | GR,
GW, | IE, | IT,
MR, | LU,
NE, | MC,
SN, | NL,
TD, | PT, | BE,
SE, | BF, | | |
| CA | 2367 | 431 | | A | 1 | 2000 | 0921 | | Ċ | A 20 | 00-2 | 3674 | 31 | 20000 | 308 | | |
| CA | 2367 | 431 | | C | | 2008 | 0610 | | | | | | | | | | |
| | 1161 | | | | | | | | E | 20 | 00-9 | 1380 | ō | 20000 | 308 | | |
| EP | 1161 | 438 | | В | 1 | 2004 | 0506 | | | | | | | | | | |
| | R: | | | | | DK,
FI, | | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | 2001 | | | | | | | | | | | | | | | | |
| | 2002 | | | | | | | | H | J 20 | 02-1 | 067 | | 20000 | 308 | | |
| | 2002 | | | | | | | | | | | | | | | | |
| BR | 2000 | 00873 | 31 | A | | 2002 | 0924 | | BI | | | | | | | | |
| JP | 2002 | 5392: | 17 | T | | 2002 | 1119 | | JI | | 00-6 | | | | | | |
| NZ | 5132 | 06 | | A | | 2004 | 0227 | | N2 | | 00-5 | | | | | | |
| ΑT | 2660 | 36 | | Τ | | 2004 | 0515 | | A. | | 00-9 | | | | | | |
| ES | 2222 | 189 | | Τ. | 3 | 2005 | 0201 | | E | | 00-9 | | | 20000 | | | |
| | 2001 | | | | | | | | | | | | | | | | |
| | 2001 | | | | | | | | | | | | | | | | |
| ВG | 1058 | 65 | | A | | 2002 | 0531 | | В | i 20 | 01-1 | 0586 |) | 2001 | 1901 | | |

| NO 2001004380 | A | 20010910 | NO | 2001-4380 | 20010910 |
|------------------------|---|----------|----|-------------|----------|
| MX 2001009290 | A | 20020225 | MX | 2001-9290 | 20010914 |
| PRIORITY APPLN. INFO.: | | | US | 1999-270497 | 19990315 |
| | | | WO | 2000-US6033 | 20000308 |

Ι

AB The instant invention provides novel macrolide I wherein X' is selected from the group consisting of C1-C10 alkyl, C3-C10 alkenyl, and C3-C10 alkynyl; Y' and Z' are independently selected from the group consisting of: (c) optionally substituted aryl, and (d) optionally substituted heteroaryl, with the proviso that both Y' and Z' are not both Ph, and with the further proviso that Y' is not isoxazole when Z' is thiophenyl; R is a hydroxy protecting group; L is CH2, C0; T is 0, NH, substituted imine; and compns. useful in treating bacterial infections. Thus, I [R = H, L = C0, T = NH, X'YZ' = CH2C.tplbond.C-(5-(2-pyridyl)-2-thienyl)] was prepared and tested in vitro for its antibacterial activity.

MSTR 1

G7 = 55

G8 = 160-57 168-55

G9 = isoquinolinyl (opt. substd.)

Patent location: claim 1

Note: also incorporates claim 14

Note: or pharmaceutically acceptable salts, solvates,

esters or prodrugs

Note: substitution is restricted

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 25 OF 29 MARPAT COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 133:104972 MARPAT

TITLE: Preparation of 6-arylphenanthridines as

phosphodiesterase IV inhibitors.

INVENTOR(S): Flockerzi, Dieter; Amschler, Hermann; Grundler,

Gerhard; Hatzelmann, Armin; Bundschuh, Daniela; Beume,

Rolf; Boss, Hildegard; Goebel, Karl-Josef; Kley,

Hans-Peter; Gutterer, Beate

PATENT ASSIGNEE(S): Byk Gulden Lomberg Chemische Fabrik G.m.b.H., Germany

SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PA | PATENT NO. KIND | | | | | | | | Al | PPLI | CATI | ои ис | ٥. | DATE | | | |
|---------|-----------------|------|------|-----|-----|------|------|-----|-----|------|------|-------|-----|------|------|------|-------|
| WO | 2000 | 0420 | 19 | A | 1 | 2000 | 0720 | | W | 20 | 00-E | P152 | | 2000 |)112 | | |
| | W: | | | | | | | | | | | | | HU, | | | |
| | | | | | | | | | | | | | | SK, | TR, | UA, | US, |
| | DW. | | | | | AM, | | | | | | | | IT, | T TT | мс | MIT |
| | EW. | PT. | | Cn, | C1, | DE, | DK, | EO, | гт, | Er, | GD, | Gr, | ır, | 11, | LO, | PIC, | INIL, |
| CA | 2359 | | | A. | 1 | 2000 | 0720 | | CZ | A 20 | 00-2 | 3594 | 16 | 2000 | 1112 | | |
| | 1147 | | | | | 2001 | | | | | | | | 2000 | | | |
| EP | 1147 | 880 | | В | 1 | 2006 | 0104 | | | | | | | | | | |
| | R: | | | | | | | | GB, | GR, | ΙT, | LI, | LU, | NL, | SE, | MC, | PT, |
| | | | | | | FI, | | | | | | | | | | | |
| | 2002 | | | | | | | | | 20 | 00-5 | 9358 | 7 | 2000 | 0112 | | |
| AT | 3150 | | | | | | | | | | 00-9 | | | 2000 | 0112 | | |
| ES | 2255 | 483 | | T | 3 | 2006 | 0701 | | E3 | 3 20 | 00-9 | 0153 | 0 | 2000 | 1112 | | |
| US | 6479 | 505 | | В | 1 | 2002 | 1112 | | U | 3 20 | 01-8 | 8914 | 3 | 2001 | 0712 | | |
| PRIORIT | Y APP | LN. | INFO | . : | | | | | E | 19 | 99-1 | 0070 | 5 | 1999 | 1115 | | |
| | | | | | | | | | WO | 20 | 00-E | P152 | | 2000 |)112 | | |

т

Title compds. [I; R1, R2 = OH, alkoxy, cycloalkoxy, cycloalkylmethoxy, fluoroalkoxy; R1R2 = alkylenedioxy; R3, R31, R4 = H, alkyl; R3R31 = AB alkylene; R5, R51 = H; R5R51 = bond; Ar = specified (substituted) bi- or tricyclyl], were prepared Thus, (-)-cis-N-[2-(3,4dimethoxyphenyl)cyclohexyl]-3,4-methylenedioxybenzamide (preparation given) was heated with POCl3 in MeCN at 80° for 3 h to give (-)-cis-6-benzo[1,3]dioxol-5-yl-8,9-dimethoxy-1,2,3,4,4a,10bhexahydrophenanthridine. This inhibited PDE4 with -log IC50 = 7.28.

MSTR 1

= quinolinyl Derivative:

Patent location: Note:

REFERENCE COUNT:

or salts of N-oxides claim 1

substitution is restricted

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

131:58654 MARPAT

L5 ANSWER 26 OF 29 MARPAT COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: TITLE:

INVENTOR(S): PATENT ASSIGNEE(S):

SOURCE:

Organometallic process and catalysts for preparing biarvl compounds Miller, Joseph Arthur; Farrell, Robert Patrick

Catalytica Pharmaceuticals, Inc., USA

U.S., 17 pp., Cont.-in-part of U.S. Ser. No. 825,792, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 5922898 A 19990713 US 6194599 B1 20010227 US 1997-966335 19971107 US 1997-825792 19970408 PRIORITY APPLN. INFO.: US 1997-825792 19970408

OTHER SOURCE(S): CASREACT 131:58654

The present invention provides a process for preparing biaryl compds. [e.g., 2-(4'-methylphenyl)benzonitrile] comprising reacting an arylmetal reagent selected from arylmagnesium reagents (e.g., 4-methylphenylmagnesium chloride) and aryl lithium reagents with an aryl halide (e.g., 2-chlorobenzonitrile) in the presence of a catalyst system comprising a catalyst selected from nickel catalysts (e.g., nickel acetylacetonate) and palladium catalysts and a cocatalyst selected from zinc cocatalysts (e.g., zinc chloride) and cadmium cocatalysts.

MSTR 1

G1-G2

= isocuinolinvl

= quinolinyl

Patent location: claim 1

REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 27 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 130:196501 MARPAT

TITLE: Preparation of biaryl compounds by coupling reaction

using palladium/carbon catalysts

INVENTOR(S): Noguchi, Yasuo; Saito, Toshinori; Fujimoto, Katsuhiko;

Takebayashi, Toyoki

PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | AP | PLICATION NO. | DATE |
|-----------------------|------|----------|----|---------------|----------|
| | | | | | |
| JP 11035514 | A | 19990209 | JP | 1997-193583 | 19970718 |
| PRIORITY APPLN. INFO. | : | | JP | 1997-193583 | 19970718 |
| | | | | | |

OTHER SOURCE(S): CASREACT 130:196501

AB R1R2 [R1, R2 = (substituted) C6-10 aryl, (substituted) aromatic heterocyclyl] are prepared by reaction of R1X (R1 = same as above; X = halo) with R2ZnY (R2 = same as above; Y = halo) in organic solvents in the presence of Pd/C catalysts and phosphines. PhMgBr was treated with ZnCl2 in THF at room

temperature for 1 h, mixed with a THF solution of Pd/C, PPh3, and 41-iodoacetophenone, and heated under reflux for 1 h to give 50% p-phenylacetophenone.

MSTR 3

G1---G5

G1 = isoquinolinyl G5 = quinolinyl Patent location:

claim 1

L5 ANSWER 28 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 118:191764 MARPAT

TITLE: Bis mono- and bicyclic aryl and heteroaryl compounds

(e.g., quinolines) which inhibit EGF and/or PDGF receptor tyrosine kinase

INVENTOR(S): Spada, Alfred P.; Maguire, Martin P.; Persons, Paul

E.; Myers, Michael R.

PATENT ASSIGNEE(S): Rhone-Poulenc Rorer International (Holdings) Inc., USA

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

| | | | | | | KIND DATE | | | | | | | | | DATE | | | |
|-------|----|------|------|------|-----|-----------|--------------------------------------|------|-----|-----|------|--------|------|-----|------|------|-----|-----|
| | | | | | | | 1992 | | | | | | | | | | | |
| | | W: | AT, | AU, | BB, | BG, | BR, | CA, | CH, | CS, | DE, | DK, | ES, | FI, | GB, | HU, | JP, | KP, |
| | | | KR, | LK, | LU, | MG, | MN, | MW, | NL, | NO, | PL, | RO, | RU, | SD, | SE, | US | | |
| | | RW: | | | | | CF, | | | | | | | | FR, | GA, | GB, | GN, |
| | | | GR, | IT, | LU, | MC, | ML, | MR, | NL, | SE, | SN, | TD, | TG | | | | | |
| I | ΑU | 9219 | 934 | | A | | 1992
1995 | 1230 | | ΑU | J 19 | 92-1 | 9934 | | 1992 | 0506 | | |
| Z | ΑU | 6586 | 46 | | B: | 2 | 1995 | 0427 | | | | | | | | | | |
| E | ΞP | 5842 | 22 | | A | 1 | 1994 | 0302 | | EE | 19 | 92-9 | 1205 | 1 | 1992 | 0506 | | |
| E | ΞP | 5842 | 22 | | В | 1 | 1997 | 1008 | | | | | | | | | | |
| | | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE | | |
| | JΡ | 0650 | 7643 | | T | | 1994
2004
1997
1997
2007 | 0901 | | JE | 19 | 93-5 | 0006 | 8 | 1992 | 0506 | | |
| Ċ | JΡ | 3507 | 071 | | B: | 2 | 2004 | 0315 | | | | | | | | | | |
| I | TΑ | 1590 | 09 | | T | | 1997 | 1015 | | A7 | 19 | 92-9 | 1205 | 1 | 1992 | 0506 | | |
| E | ΞS | 2108 | 120 | | T. | 3 | 1997 | 1216 | | ES | 19 | 92-9 | 1205 | 1 | 1992 | 0506 | | |
| | CA | 2102 | 780 | | С | | 2007 | 0109 | | CF | 19 | 92-2 | 1027 | 80 | 1992 | 0506 | | |
| Į | JS | 5409 | 930 | | A | | 1995 | 0425 | | US | 3 19 | 93-1 | 4607 | 2 | 1993 | 1108 | | |
| | | | | | | | 1997 | | | | | | | | | | | |
| Ţ | JS | 6645 | 969 | | B | 1 | 2003 | 1111 | | US | 19 | 95-5 | 2185 | 2 | 1995 | 0518 | | |
| (| CN | 1187 | 129 | | A | | 1998 | 0708 | | Cl | 1 19 | 96-1 | 9451 | 2 | 1996 | 0606 | | |
| (| CN | 1100 | 540 | | С | | 2003 | 0205 | | | | | | | | | | |
| Į | JS | 3625 | 6 | | Ε | | 1999 | 0720 | | US | 3 19 | 97-9 | 8800 | 5 | 1997 | 1210 | | |
| Ţ | JS | 3765 | 0 | | E | 1 | 2002 | 0409 | | US | 20 | 00 - 4 | 9639 | 9 | 2000 | 0202 | | |
| Ţ | JS | 2004 | 0014 | 774 | A. | 1 | 2004 | 0122 | | US | 20 | 03-6 | 1734 | 2 | 2003 | 0710 | | |
| PRIOR | IΤ | APP | LN. | INFO | . : | | 2001 | | | US | 19 | 91-6 | 9842 | 0 | 1991 | 0510 | | |
| | | | | | | | | | | WO | 19 | 92-U | S373 | 6 | 1992 | 0506 | | |
| | | | | | | | | | | | | | | | | | | |

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| WO | 1994-US14180 | 19941208 |
| US | 1995-521852 | 19950518 |
| US | 1996-652444 | 19960604 |

GI

AB A method of using the title compds. in which a lst ring system is (hetero)aryl, a 2nd ring system is (hetero)aryl or (hetero)carboxylic, and both ring systems are either (un)substituted monocyclic with 0-2 heteroatoms, or bicyclic with 0-4 heteroatoms, is claimed, along with pharmaceutical compns. and selected compds. Most of the prepared and claimed compds are quinolines and quinoxalines. The compds are designed to inhibit abnormal cell proliferation, and their use for treating psoriasis, atherosclerosis, and vascular reocclusion is claimed. For example, coupling of 2-methoxy-5-(trimethylstannyl)pyridine with 6,7-dimethoxyquinolin-3-yl trifluoromethanesulfonate (prepns. given) in refluxing dioxane containing Pd(PPh3)4 and LiG1 gave pyridylquinoline

derivative I. The IC50 of I for inhibiting PDGF-R cell-free autophosphorylation was 0.030-0.070 $\mu M.$

MSTR 1L

G1-G2

G1 = isoquinolinyl (opt. substd.)
G2 = quinolinyl (opt. substd.)

Derivative: and pharmaceutically acceptable salts

Patent location: claim 3

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 29 OF 29 MARPAT COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 114:102392 MARPAT

TITLE: Preparation of N-phosphonomethylglycine in the presence of dipyridyl compounds

INVENTOR(S): Fields, Donald L., Jr.; Grabiak, Raymond C.; Riley,

Dennis P.

10/587100

PATENT ASSIGNEE(S): SOURCE:

Monsanto Co., USA U.S., 7 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | API | PLICATION NO. | DATE |
|------------------------|-----------|-------------|--------|----------------|----------|
| US 4952723 | A | 19900828 | US | 1989-386738 | 19890731 |
| IL 95218 | A | 19950124 | IL | 1990-95218 | 19900729 |
| AU 9059939 | A | 19910131 | AU | 1990-59939 | 19900730 |
| AU 621768 | B2 | 19920319 | | | |
| CA 2022248 | A1 | 19910201 | CA | 1990-2022248 | 19900730 |
| EP 412074 | A2 | 19910206 | EP | 1990-870121 | 19900730 |
| EP 412074 | A3 | 19910522 | | | |
| EP 412074 | B1 | 19941228 | | | |
| R: AT, B | E, CH, DE | , DK, ES, F | R, GB, | GR, IT, LI, LU | , NL, SE |
| JP 03081281 | A | 19910405 | JP | 1990-202361 | 19900730 |
| JP 06008307 | В | 19940202 | | | |
| ZA 9005972 | A | 19910731 | ZA | 1990-5972 | 19900730 |
| BR 9003702 | A | 19910903 | BR | 1990-3702 | 19900730 |
| HU 209616 | В | 19940928 | HU | 1990-4696 | 19900731 |
| PRIORITY APPLN. IN | FO.: | | US | 1989-386738 | 19890731 |
| OTHER SOURCE(S):
GI | CA | SREACT 114: | 102392 | | |

III

AB (HO)2P(O)CH2NHCH2CO2H (I) is prepared by oxidation of (HO)2P(O)CH2N(CH2CO2H)2 (II) over metal salt (complex) catalysts in the presence of a dipyridyl compound as electron transfer agent. A mixture of II, VOSO4, and salt III in H2O was heated at 75° under 6.89 + 105 N/m2 oxygen for 5.5 h to give I with 83% conversion and 94% selectivity, vs. 97.7% and 51.0%, resp., without III. Also used were 6 addnl. dipyridyl compds.

MSTR 1A

G1-G2

= 46 / 47 / 48 / 77 / 78 / 75 G1



G2 = 46 / 47 / 48 / 77 / 78 / 75

47 48 77 78 N 75

Derivative: and salts Patent location: claim 1

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'REGISTRY' ENTERED AT 14:04:13 ON 28 JUL 2009

FILE 'REGISTRY' ENTERED AT 14:04:27 ON 28 JUL 2009

L1 STRUCTURE UPLOADED

L2 28 S L1 SAM L3 602 S L1 FULL

FILE 'CA' ENTERED AT 14:04:59 ON 28 JUL 2009

L4 15 S L3

FILE 'MARPAT' ENTERED AT 14:06:12 ON 28 JUL 2009

29 S L1 FULL

L5

---Logging off of STN---

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Executing the logoff script...

=> LOG Y

STN INTERNATIONAL LOGOFF AT 14:07:20 ON 28 JUL 2009